



CPD

Working Paper

125

Finance for SDGs *Addressing Governance Challenge of Aid Utilisation in Bangladesh*

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Aid Utilisation in Bangladesh***

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Publisher

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First Published May 2019

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Tk. 95

USD 6

ISSN 2225-8175 (Online)

ISSN 2225-8035 (Print)

Cover design

Avra Bhattacharjee

C42019_2WP125_SDG

Centre for Policy Dialogue (CPD) was established in 1993 as a civil society initiative to promote an ongoing dialogue between the principle partners in the decision-making and implementing process. Over the past 25 years, the Centre has emerged as a globally reputed independent think tank, with local roots and global reach. A key area of CPD's activism is to organise dialogues to address developmental policy issues that are critical to national, regional and global interests, with a view to seeking constructive solutions from major stakeholders. The other key area of CPD's activities is to undertake research programmes on current and strategic issues.

CPD's dialogues are designed to address important policy issues and to seek constructive solutions to these problems. In doing so, CPD involves all important cross-sections of the society, including public representatives, government officials, business leaders, activists of grassroots organisations, academics, development partners and other relevant interest groups. CPD focuses on frontier issues which are critical to the development process of Bangladesh, South Asia and LDCs in the present context, and those that are expected to shape and influence the country's development prospects from the mid-term perspectives. CPD seeks to provide voice to the interests and concerns of the low-income economies in the global development discourse. With a view to influencing policies, CPD deploys both research and dialogue which draw synergy from one another.

CPD's research programmes are both serviced by and intended to serve, as inputs for particular dialogues organised by the Centre throughout the year. Major research themes are: macroeconomic performance analysis; poverty and inequality; agriculture; trade; regional cooperation and global integration; infrastructure; employment, and enterprise development; climate change and environment; development governance; policies and institutions, and the 2030 Agenda for Sustainable Development.

CPD also conducts periodic public perception surveys on policy issues and issues of developmental concerns. With a view to promoting vision and policy awareness amongst the young people of the country, CPD is also implementing a Youth Leadership Programme. CPD serves as the Secretariat of two global initiatives. *LDC IV Monitor* is an independent global partnership for monitoring the outcome of the Fourth UN Conference on the LDCs. *Southern Voice on Post-MDGs* is a network of 50 think tanks, which seeks to contribute to the ongoing global discourse on the SDGs. At the national level, CPD hosts the Secretariat of the *Citizen's Platform for SDGs, Bangladesh*—a civil society initiative that include more than 100 Partner organisations, founded with an objective to contribute to the delivery of the SDGs and enhance accountability in its implementation process.

Dissemination of information and knowledge on critical developmental issues continues to remain an important component of CPD's activities. Pursuant to this, CPD maintains an active publication programme, both in Bangla and in English. As part of its dissemination programme, CPD has been bringing out CPD Occasional Paper Series on a regular basis. It may be noted in this connection that since November 2011, the Series has been re-introduced as **CPD Working Paper Series**. Research work in progress, background papers of dialogues, investigative reports and results of perception surveys which relate to issues of high public interest are published under this series.

The present paper titled **Finance for SDGs: Addressing Governance Challenge of Aid Utilisation in Bangladesh** has been prepared by *Dr Fahmida Khatun*, Executive Director, CPD <fahmida@cpd.org.bd>; *Mr Syed Yusuf Saadat*, Research Associate, CPD <saadat@cpd.org.bd> and *Mr Md. Kamruzzaman*, Research Associate, CPD <aman@cpd.org.bd>

The study was carried out as part of CPD's programme on "Moving on the Middle Income Path in the Era of SDGs: Overcoming the Governance Challenges," supported by the Royal Danish Embassy in Bangladesh. An earlier draft of the paper was presented at a CPD dialogue titled "Catalysing Development Finance for Bangladesh: Mobilisation and Utilisation Challenges," held on 8 November 2018, in Dhaka.

Executive Editor: *Ms Anisatul Fatema Yousuf*, Director, Dialogue and Communication, CPD

Series Editor: *Dr Fahmida Khatun*, Executive Director, CPD

Bangladesh's upcoming graduation from least developed country (LDC) status, which may potentially take place in 2024, has generated renewed interest in the country's ability to mobilise finance for development from external and domestic sources. Over the years, foreign aid received by Bangladesh has become more project-specific, multilateral and loan-dominated. While the commitment and disbursement gap has been widening, Bangladesh's overall dependence on aid has declined. Thus, it remains to be seen whether Bangladesh can fully transform from an aid-dependent to a trade-led economy. This study investigates the impact of foreign aid in Bangladesh, and attempts to uncover whether the development progress of the country can be sustained in the absence of foreign aid. A broad-based empirical analysis shows that, foreign aid is not a statistically significant determinant of economic growth in Bangladesh. However, a more disaggregated analysis reveals that, foreign aid to the health sector can significantly improve health outcomes. These findings show that, while foreign aid may not be a driving force of economic growth per se, it is still an important source of support for the social sectors of the country, which receive limited resource from the government. Hence, Bangladesh will have to improve the efficiency in aid utilisation. However, the country cannot expect to continue receiving foreign aid perpetually, and must prudently prepare for a gradual and systematic phase-out. Since graduation to a developing country status will make obtaining external finances more difficult and expensive, improving generation of domestic resources and their efficient use will be of critical importance for Bangladesh in the coming years.

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Acronyms

ADB	Asian Development Bank
ADP	Annual Development Programme
AfT	Aid for Trade
AIC	Akaike Information Criterion
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
ChDR	Child Death Rate
DAC	Development Assistance Committee
DAH	Development Assistance for Health
DOLS	Dynamic Ordinary Least Squares
DPP	Development Project Proforma
ERD	Economic Relations Division
EU	European Union
FDI	Foreign Direct Investment
FfD	Finance for Development
FTI	Fast-Track Initiative
GDP	Gross Domestic Product
GNI	Gross National Income
GoB	Government of Bangladesh
GPE	Global Partnership for Education
HDI	Human Development Index
IATI	International Aid Transparency Initiative
IDB	Islamic Development Bank
IFAD	International Fund for Agricultural Development
IMED	Implementation Monitoring and Evaluation Division
IMF	International Monetary Fund
IMR	Infant Mortality Rate
JMRIP	Joydebpur-Mymensingh Road Improvement Project
KPI	Key Performance Indicator(s)
LDC	Least Developed Country
LMIC	Lower Middle-Income Country
MDG	Millennium Development Goal(s)
MoF	Ministry of Finance
MW	Megawatts
NGO	Non-Government Organisation
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares
PEPFAR	(U.S.) President's Emergency Plan for AIDS Relief
PIDSPSS	Physical Infrastructure Development for Selected Private Secondary Schools
PPP	Purchasing Power Parity

PRSP	Poverty Reduction Strategy Paper
SDG	Sustainable Development Goal(s)
SFP	School Feeding Programmes in Poor and Distressed Areas
SIC	Schwarz Information Criterion
UK	United Kingdom
UMIC	Upper Middle-Income Country
UNICEF	United Nations Children's Fund
USA	United States of America
USD	United States Dollar
U5MR	Under-Five Mortality Rate
VECM	Vector Error Correction Model
WDI	World Development Indicators
WGI	Worldwide Governance Indicators
7FYP	Seventh Five Year Plan

1. INTRODUCTION*

1.1 Background

Bangladesh has been performing well in terms of growth of its gross domestic product (GDP) that has reached the 7.8 per cent mark in FY2017-18 (BBS, 2019). The long-term growth scenario has also been stable, with an increase of GDP by 1 per cent every decade since the 1970s. High growth has contributed to the reduction of number of people living under extreme poverty line from 44.2 per cent in 1992, to 12.9 per cent in 2016 (BBS, 2017). Increased growth has been reflected in higher per capita income that reached USD 1,080 in terms of purchasing power parity (PPP) in 2015. As a result, the country achieved the lower middle-income country (LMIC) status in 2015 from a low-income country status by World Bank category (GED, 2015). With a high growth momentum, Bangladesh aspires to achieve not only the upper middle-income country (UMIC), but sets the target to become a high-income country by 2041.

Bangladesh is also in the process of graduating from its status of a least developed country (LDC) to a developing country. The country has fulfilled all three criteria to be eligible for graduation in March 2018. These are—per capita gross national income (GNI), human assets and economic vulnerability. If everything goes smoothly, it is expected that, Bangladesh will complete its graduation by 2024. However, Bangladesh needs to deal with several challenges as it moves forward to make its growth sustainable. One such challenge will be mobilisation of finance for development (FfD) from external sources. Once graduated, terms of official development assistance (ODA) will change and external resources will be costly, as the grant element may not be widely available. This could potentially put pressure on debt servicing. Though the share of ODA, as percentage of GDP has declined to 1.47 per cent in FY2016-17, compared to 3.07 per cent in FY1996-97, the need for ODA in development activities of Bangladesh is still significant; and, it will be felt even more during the country's journey of implementation of the Sustainable Development Goals (SDGs) by 2030.

Financing is widely recognised to be the cornerstone of SDG implementation. SDG 17, which urges on strengthening the means of implementation and revitalising the global partnership for sustainable development, specifically refers to finance as an important component. Much of this finance to LDCs and developing countries will be channelled through ODA. Hence, SDG target 17.2 calls for developed countries to fully implement their ODA commitments.

Foreign aid is an important component of Bangladesh's developmental finance. Although the share of ODA in Bangladesh's GDP has declined over time, the need for ODA in financing development projects is still significant. About 37.1 per cent of development budget is supported by ODA (MoF, 2019). While there is a higher demand for resources from the international sources, a paradoxical situation is observed. A large amount of foreign aid remains in the pipeline, indicating that, new funds do not necessarily guarantee their timely and full utilisation. This has implications for development initiatives. The challenges related to foreign aid in Bangladesh are two-fold: (i) efficient disbursement; and (ii) efficient utilisation. This emphasises the need for improving the governance of aid utilisation.

The above context leads one to ponder about a few issues. Will the contribution of ODA reduce in Bangladesh in the coming days? Will Bangladesh be able to do without foreign aid? Has there been any significant impact of foreign aid on Bangladesh? Are there differences in case of impact of foreign aid at the macro and micro levels? What should be the strategy of policymakers in improving aid

*Research support received from *Ms Shamila Neemat Sarwar*, Programme Associate, and *Mr Fahmid Tawsif Khan Chowdhury*, former Intern, CPD is gratefully acknowledged.

effectiveness? Though foreign aid is a much-discussed topic in the development discourse, it needs to be revisited at this point in Bangladesh's development path, when the country is at a crossroad.

1.2 Objectives and research questions of the study

In view of the above context, it is obvious that, as Bangladesh pursues the SDGs, the country will have to make the most out of its available resources. On one hand, new and innovative sources of foreign funds have to be explored in order to implement the vast agenda of the SDGs; on the other, the absorption capacity of the country should be strengthened to benefit from the utilisation of these funds.

Thus, a study on revisiting aid utilisation challenges can shed some light on the dynamics of the foreign aid situation in the current context of Bangladesh. It can also guide policymakers in finding ways towards improving aid effectiveness in a period, when foreign aid is becoming scarce. In this backdrop, the proposed research has the following objectives:

- present an overview of aid dynamics in Bangladesh in recent periods in the SDG context;
- estimate the impact of aid at the macro level, by looking into the relationship between foreign aid and economic growth;
- estimate the impact of aid at the micro level, by looking into the impact of aid on health outcome; and
- make policy recommendations for better utilisation of aid, based on the analysis performed in this study.

In undertaking this exercise, the study will attempt to answer a number of relevant research questions. These are: (i) what kind of relationship is there between foreign aid and economic growth of Bangladesh; (ii) does Bangladesh need foreign aid at all; and (iii) what the underlying reasons are for low aid utilisation. By evaluating information through both qualitative and quantitative exercises, the study attempts to make an important contribution to the ongoing debate and discussions on aid effectiveness in Bangladesh.

1.3 Methodology and data

The study has adopted a three-pronged approach to achieve its research objectives. First, the study surveyed literature to draw the narratives on foreign aid effectiveness. The exercise also involved a review of various government and donor documents related to aid and donor-supported projects. Second, data analysis was undertaken by collating information on foreign aid flow from a number of sources in a disaggregated manner. Based on available data, quantitative exercise has been carried out to understand the effectiveness of foreign aid. In this case, two different exercises have been performed. The first quantitative analysis has been undertaken to see the relationship between foreign aid and economic growth in Bangladesh. The second exercise is done to assess the impact of foreign aid on health outcomes in the context of Bangladesh. The third methodology of the study was to seek information from a number of key informants, such as policymakers, experts and representatives of development partners, to solicit their views on why utilisation of aid is challenging. Data for this research has been collected from secondary sources including Ministry of Finance (MoF) and Ministry of Planning of the Government of Bangladesh (GoB), Bangladesh Bureau of Statistics (BBS) and the World Bank.

1.4 Structure of the paper

The study is organised in the following manner. The introductory section presents the background of Bangladesh's current economic situation, and how foreign aid can play a role in its future journey. The section also describes the objectives, research questions, methodology and sources of data for the study. Literature on aid effectiveness is vast. Section 2 provides a review of some relevant and important literature from both global and national studies, and summarises the impact of foreign aid across nations. Section 3 highlights the need for additional resources and better governance of resource utilisation, particularly foreign resources, in implementing the SDGs in Bangladesh. In doing so, the section provides a brief overview of foreign aid scenario in Bangladesh. Various aspects of evolving aid regime in Bangladesh are discussed in this section, including the trend of flow, sources of aid, composition, sectoral distribution, commitment and disbursement, and Bangladesh's debt service situation. Section 4 describes the challenges of aid utilisation in Bangladesh based on existing information and interviews of key informants. In Sections 5 and 6, an evaluation of foreign aid has been performed in the context of Bangladesh by using econometric analysis. In Section 5, the assessment has been done at the macro level; i.e. the impact of foreign aid on economic growth has been explored by estimating a suitable econometric model. The same model has been used to understand the impact of foreign aid on health outcomes in Section 6. Section 7 summarises the major findings as regards the aid in Bangladesh, on the basis of overall and micro-level assessments. It presents a set of recommendations for the policymakers in Bangladesh based on the findings of the study.

2. LITERATURE REVIEW ON IMPACT OF AID EFFECTIVENESS

Foreign aid and its effectiveness in recipient countries is a widely discussed issue. Not only is the literature vast, but the findings are also diverse and contradictory in many instances. In this section, some of the important debates on the impact and effectiveness of aid in recipient countries and their associated reasons are explored. Given the wide range of the literature, the discussions are structured in three ways. In Section 2.1, findings of a number of global studies are presented. In Section 2.2, findings of a few studies on Bangladesh are discussed. In Section 2.3, theme-wise features of the impact of foreign aid and factors influencing the outcome of foreign are analysed. In the last sub-section, Section 2.4, a summary of findings on the impact of aid is presented.

2.1 Global studies on aid effectiveness

Presumably, aid is provided with the intention of fostering development in recipient countries. There are many developmental objectives that aid is expected to achieve, which are based on the fundamental assumption that aid works in reducing poverty. However, discussions on the effectiveness of aid in achieving developmental outcomes in recipient countries are diverse. There are critics who have considered aid to be malignant, malfunctioning and counterproductive (McGillivray, 2005). A large number of studies argue that aid flows have had a significant role in the failure of the development efforts in developing countries (Elayah, 2016). In some cases, aid made insignificant contributions towards economic progress of recipient countries (Fox, 2000).

It has also been observed that, the countries with urgent need for aid are likely to be the ones with malgovernance, which inevitably restricts the effectiveness of aid. Factors such as corrupt environment, destructive development policies and dishonest regimes were found to be responsible for poor performance of aid programmes (Elayah, 2016). Most donors still basing their aid on various targets and self-centred interests, including political, strategic, commercial, cultural and religious ones, poses a major problem. The problem relates to the fact that donors, while always keen to promote

these targets and interests, conversely show little consideration by holding the recipient countries accountable, when the aid objectives are not achieved. Donors should review the self-centred aspect of their interests related to granting aid, and even realise, that their missions lie in reforming corrupt environments in target countries (Elayah, 2016).

Easterly (2006) showed that, financial aid was spent in countries that had a slight decrease in poverty and enjoyed minimal growth. From another perspective, although exceptionally large amounts of foreign aid have been spent, the external assistance resulted in a decline in growth in the recipient countries. This, however, does not establish the fact that the fall in growth was accompanied by the influx of foreign aid. Rather, it demonstrates that, foreign aid has not always been able to curb this decline (Elayah, 2016).

Moreover, economic growth could take place in countries even without foreign aid. For example, international donor communities have repeatedly mentioned Ghana as an African success story. However, Easterly (2002) noted that, donors had seemingly excluded Ghana from their list following the economic turmoil. Moreover, while the World Bank had tagged South Korea as one of the 'long-term success stories', a study had revealed that, the country experienced economic growth only after aid from the United States of America (USA) declined (Easterly, 2002).

On the contrary, there are certain prerequisites assigned by analysts that must be attained before aid can be effective. For instance, the supporters of aid associate its efficacy with the performance of several factors. These include utilising external aid in programmes and strategies that are designed to support the national economic growth, make necessary institutional adjustments, and tackle the poverty situation in recipient countries (Elayah, 2016). Additionally, Gopalan and Rajan (2016) concluded that, a country needs to meet a certain development or income threshold before aid can prove to be effective, and that aid flows tend to have diminishing returns.

Williamson (2009) compressed theories on foreign aid as public interest theory that argues for foreign aid, and public choice perspective that treats foreign aid as ineffective, and even damaging sometimes, to recipient countries. Upon examination of recent literature, the paper stood on that, the foreign aid does not deliver economic success. The paper reveals that, lack of incentives and information are the reasons for the failure of foreign aid. Foreign aid succeeds when development incentives are ensured for both donor and recipient countries; and necessary information are available and utilised in strategising the development goals and targets by them.

Reviewing over 200 papers, Asongu (2016) elucidated that, to achieve sustainable and inclusive development, foreign aid should not be targetted towards industrialisation of developing countries. Rather than considering that inequality will reduce with progress in industrialisation, emphasis on inequality by mitigating short-term poverty, addressing concerns of burgeoning population growth, training recipient governments on inclusive development, fighting corruption and mismanagement, and avoiding the shortfalls of celebrated Kuznets' conjectures will lead to more sustainable development outcomes.

Ang (2010) found that, foreign aid has a direct damaging effect on the economic performance of India, but liberalising the financial system can improve the effectiveness of aid on growth. The positive effect of foreign aid is better realised through the channel of financial liberalisation than the banking sector or stock market development. Moreover, the existence of a good policy environment in terms of intellectual property rights protection framework has no significance on the aid-growth nexus in India.

A study by Niyonkuru (2016) showed that, the given aid is shrouded with hidden agenda from donors who set unbearable conditionality and hard-to-meet desired results. The inefficacy of foreign aid to

eradicate poverty was seen as inherent to its nature. If foreign aid is to yield good results, the paper suggests getting rid of unfruitful conditionalities which were seen as rather harmful.

Burnside and Dollar (1997, 2004) showed that aid has a positive impact on growth in countries where good fiscal, monetary and trade policies prevail, and in the absence of good policies, aid has little impact. Kosack and Tobin (2006) concluded that aid works 'against' development in countries with extremely low level of human capital, where the Human Development Index (HDI) scores are very poor. These findings have been challenged by others, who argue that aid effectiveness is not conditioned on policy environment.

2.2 Studies on aid effectiveness in Bangladesh

Studies that have looked into the impact of foreign aid on the Bangladesh economy, have failed to reach any decisive conclusion. A review of the literature reveals that studies have produced a wide variety of results depending on the variables used, the estimation techniques applied, and the time period chosen. In one of the early studies on the subject, it was found that, foreign aid has a negative impact on domestic resource mobilisation in Bangladesh in the short-run (Sobhan and Islam, 1988). In another study, it was found that, domestic resource mobilisation is more strongly linked to economic growth than to foreign aid in the context of Bangladesh (Islam, 1992). Indeed, Vector Error-Correction Model (VECM) and Granger causality test could not establish any short- or long-run causal relationship between foreign aid and economic growth in Bangladesh (Hassan, 2017). The usefulness of foreign aid has also been questioned from other perspectives. For instance, it has been observed that, poverty has persisted in Bangladesh despite the influx of foreign aid; so, the existence of poverty was not due to lack of resources, but rather for the lack of good governance (Sobhan, 1998). Poor governance has also limited the positive impact of foreign aid on education and health outcomes in Bangladesh (Sobhan, 2005). However, subsequent researches have shown that, the foreign aid tends to crowd out government expenditure on healthcare in Bangladesh, and so its impact on health outcomes cannot be ascertained clearly (Ahmed and Alorbi, 2018). Nonetheless, ensuring good governance has been viewed as a necessity for improving the effectiveness of foreign aid in Bangladesh (Quibria and Islam, 2015).

A study by Khatun, Dewan and Hossain (2013) evaluated the effectiveness and impact aid for trade (AfT) support in Bangladesh both at the macro and micro levels. By assessing the impact of AfT on the macro-economy in general, and on AfT-supported projects in particular, this study found that there has been erratic flow of AfT disbursement in the country. Moreover, AfT had no impact at the macro level, particularly for boosting exports in the country, but AfT-supported projects have benefitted from AfT. Khatun (2009) discussed the changing aid scenario and its implication for Bangladesh. The paper presented perspectives of both donors and government officials on aid effectiveness. The author highlighted a number of key issues related to aid effectiveness in line with the Paris Declaration on aid effectiveness. The author observed that, instead of only looking at aid effectiveness, Paris Principles should be broadened to understand development effectiveness of aid, because development is not just about growth, but also about social justice (Khatun, 2009).

2.3 Factors influencing aid effectiveness

Transparency and institutional environment in recipient countries

Transparency is critical for effective utilisation of assistance received from development partners. Without effective transparency, rent-seeking activities and mismanagement can lead to diversion of funds. Delay in disbursements may result in incompetence or weakness of the structure of recipient

Table 1: Estimates of capture of funds in various countries

Country	Year	Expenditure Type	Capture Rate (%)
Chad	2004	Non-wage recurrent health expenditure	73.0 (from central to regional) 99.0 (from central to local)
Ghana	1998	Non-wage spending in primary education (multiple programmes)	49.0
	2000	Non-wage health expenditure	80.0
Kenya	2004	Health and education funding	38.0 (health) 35.8 (education)
Indonesia	1998-99	Rice distribution	18.0
	2003-04	Road project expenditure, including wages	29.0
Madagascar	2002-03	Government school grants	7.0
Peru	2001	School utility bills	30.0
	2002	'Glass of Milk' nutrition programme	25.0
Tanzania	1998	Non-wage spending in primary education (multiple programmes)	57.0
Uganda	1995	Per student capitation grant	78.0
	2001		20.0
Zambia	2001	Fixed school grant	10.0
		Discretion non-wage grant programme	76.0

Source: Adapted from Collin et al. (2009, 26).

country's law and order (Diarra, 2011). Ghosh and Kharas (2011) reported that, although USD 32 billion aid was pledged by the USA in 2009, only USD 6 billion was registered in the national databases. Collin et al. (2009) estimated that, nearly USD 12 billion of annual aid from the International Aid Transparency Initiative (IATI) signatories are susceptible to 'capture'. Capture is a diversion or redirection of public funds with any official record. Table 1 summarises the rate of capture in various development assistance programmes by different countries.

Easterly (2006) noted that, countries which were slowly establishing themselves among middle- and high-income countries, were also among the best 10 countries that had managed to attain the high growth rate in average per capita (Table 2). For most of these countries, donors merely played a facilitative role. The countries employed suitable methods to create an enabling environment for development. On the other hand, the author also noted that, the worst 10 countries had experienced extreme poverty as a result of unskilled management and corruption. Apart from geographic conditions, scarce natural resources and natural disasters, the countries were governed by 'destructive and overconfident regimes' (Easterly, 2006). Moreover, researchers also believe that, the diversion of resources from the IATI signatories could be reduced by at least USD 900 million through better transparency (Collin et al., 2009). Additionally, the Ugandan experience suggests that, increasing availability of information on use of resources reduced the diversion of education resources. For example, in 1999, the Ugandan schools received over 90 per cent, which used to be only 20 per cent in 1995 (Reinikka and Svensson, 2001).

A study by Fielding and Mavrotas (2005) examined aid volatility in 66 countries during the period 1975–2004. By distinguishing between sectoral aid and total aid, the authors concluded that, volatility of aid was more common in countries with weak political institutions and historically poor macroeconomic policies. In contrast to this, findings of Dreher, Nunnenkamp and Thiele (2008) suggested that, the impact of aid does not depend on democracy.

Table 2: Ten best and worst per capita growth rates: 1980–2002

Country	Per capita growth (%)	Aid as percentage of GDP	Time (%) under IMF programmes
<i>Ten best per capita growth rates (1980–2002)</i>			
South Korea	5.9	0.03	36
China	5.6	0.38	8
Taiwan	4.5	0.00	0
Singapore	4.5	0.07	0
Thailand	3.9	0.81	30
India	3.7	0.66	19
Japan	3.6	0.00	0
Hong Kong	3.5	0.02	0
Mauritius	3.2	2.17	23
Malaysia	3.1	0.40	0
<i>Median</i>	<i>3.8</i>	<i>0.23</i>	<i>4</i>
<i>Average</i>			<i>11.60</i>
<i>Ten worst per capita growth rates (1980–2002)</i>			
Nigeria	-1.6	0.59	20
Niger	-1.7	13.50	63
Togo	-1.8	11.18	72
Zambia	-1.8	19.98	53
Madagascar	-1.9	10.78	71
Ivory Coast	-1.9	5.60	74
Haiti	-2.6	9.41	55
Liberia	-3.9	11.94	22
Democratic Republic of Congo	-5.0	4.69	39
Sierra Leone	-5.8	15.37	50
<i>Median</i>	<i>-1.9</i>	<i>10.98</i>	<i>54</i>
<i>Average</i>			<i>52</i>

Source: Easterly (2006), cited in Elayah (2016, 86).

Note: IMF: International Monetary Fund.

Donor prioritisation

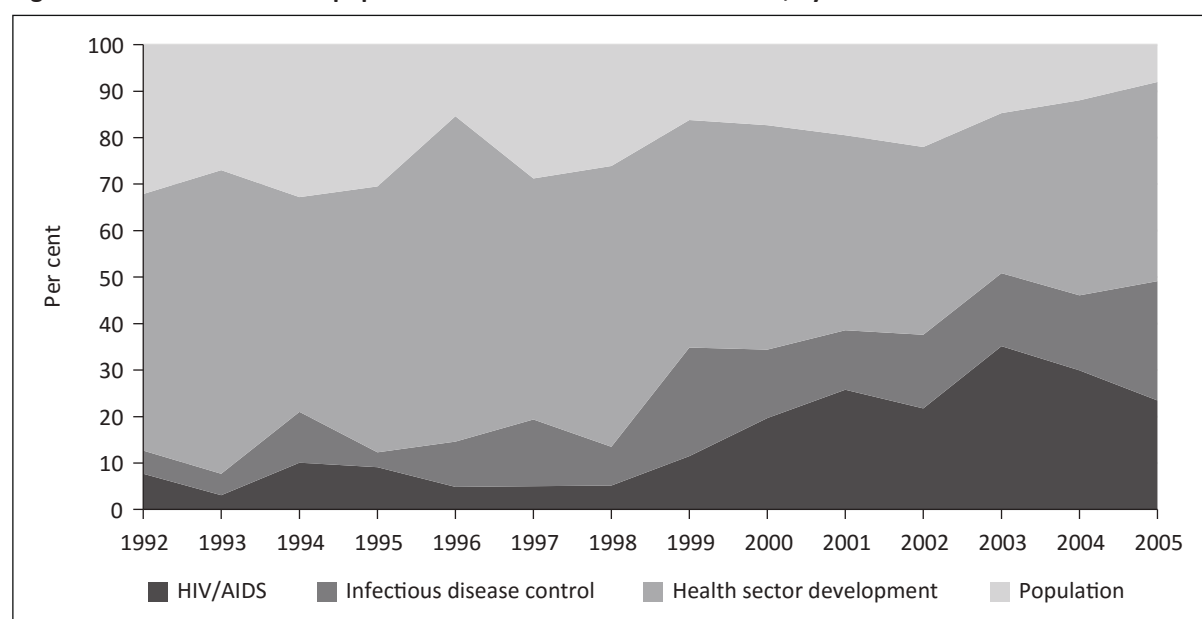
Several studies indicate that, foreign funds tend to flow towards sectors that are prioritised by donors. This holds true for education and health sectors in general. There exists a significant discrepancy between what aid does and what it could potentially accomplish. Evidence indicates the presence of such discrepancy in foreign aid's contribution towards improving educational quality. For example, Riddell and Niño-Zarazúa (2016) analysed the contribution of foreign aid in education. In their analysis, the authors took into consideration the preliminary report of the Global Partnership for Education (GPE, previously Fast-Track Initiative or FTI). GPE claimed that, countries receiving GPE support had performed better in basic education indicators, compared to non-partner countries. However, Cambridge Education, Mokoro Ltd. and Oxford Policy Management (2009) could not find any robust evidence to support the claim that FTI-endorsed countries have systematically outperformed the unendorsed ones.

Aid has been targetted towards various school interventions, such as school feeding programmes, construction of classrooms, scholarships for females and curriculum development (Riddell and Niño-Zarazúa, 2016). In this regard, studies have also looked into the impact of aid in educational outcomes.

Dreher, Nunnenkamp and Thiele (2008) found that primary enrolment increased 2.5–5 per cent due to an increase of aid by 1 per cent of GDP. However, most of the aid efforts had been made towards achieving tangible outcomes, such as expanding enrolment, especially of basic education (Riddell and Niño-Zarazúa, 2016). In another study, using a sample of multiple poor economies, Pritchett and Filmer (1997) found that, expenditure behind instructional materials in education yielded 14-fold higher returns than spending on physical infrastructure. Despite such higher returns, donor preference lies in tangible outcomes over less conspicuous materials, such as textbooks (Easterly, 2002). Similarly, donor funds flowed towards setting up expensive and distinguishable satellite early-warning systems for drought in Africa, replacing the low-cost but unobservable widely dispersed rain gauges (Easterly, 2002).

In the health sector, there is evidence that, donor prioritisation for treatment and prevention of certain type of diseases may have displaced aid for other health issues. Shiffman (2008) observed several trends, that indicate possible displacement of funds from other sectors due to HIV/AIDS prioritisation by donors (Figure 1). It is also noteworthy that, share of HIV/AIDS commitment declined in 2004 and 2005. Shiffman (2008) suggests the decline could stem from the launching of two major global initiatives—the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), and the Global Fund to Fight AIDS, Tuberculosis and Malaria—which had committed massive amounts of funds for the subsequent years.

Figure 1: Share of health and population commitments from all donors, by issue



Source: Authors' calculations based on the data from Shiffman (2008).

By using more than 60 data sources from several development and partner organisations, Dieleman et al. (2016) laid out the previous trends in development assistance. Their observations indicated that: (a) over USD 500 billion was disbursed as development assistance for health (DAH) from 1990 to 2015; (b) USD 36.4 billion was expended in 2015, a significant increase compared to 1990 (USD 7.2 billion), and 2000 (USD 11.7 billion); and (c) DAH increases were significantly greater than that in the non-MDG (Millennium Development Goals) period.

Moreover, non-communicable diseases received a small amount of DAH compared to their burden. Dieleman et al. (2014) noted that, the burden of non-communicable diseases accounted for 49.8 per cent of the all-cause burdens, but DAH for such diseases was only 1.5 per cent of all DAH. However, the

authors cautioned the readership about interpreting this finding, since information on cost-effective interventions for non-communicable diseases is less perspicuous. But the authors also concluded that, the total DAH received by countries like Botswana and Namibia, had far exceeded the expectations, while the DAH received in the health focus areas of these countries was much lower. These within-country disparities signal that, DAH is being disbursed across disease areas based on preferences of the grantees.

Commitment vs. disbursement

International communities widely recognise that, a significant amount of aid can have proportionate impact on welfare of the poor. Hudson (2013) concluded that, all aid commitments are sorted out in two years, with majority being met immediately. But the author found anomalies while investigating individual sectors. Sometimes debt aid commitments were found to be satisfied beyond the committed amount in a hasty manner. In addition, sectors such as physical infrastructure and other social infrastructure had experienced slow disbursements. Hudson found that, the commitments in these two sectors had a significant impact on disbursements even after five years of commitment.

A problem of unreliable donor behaviour can be evident through excessive administrative delays in aid bureaucracies, burdensome approval and disbursement processes, and intra-year aid rearrangements that prevent the timely disbursement of announced and expected aid for a recipient country. It is also likely that, donors may increase or reduce their originally planned aid to a recipient country due to political developments or needs of other countries (Celasun and Walliser, 2008). For example, a survey on the predictability of donor funding in 15 African countries in 2004 revealed that, 40 per cent of disbursement delays had emerged from failure of governments to meet policy conditions of donors (Leurs, 2005).

On the other hand, volatility and predictability of aid can have differentiated impacts on macroeconomic health. Oftentimes, the terms ‘unpredictability’ and ‘volatility’ have been used interchangeably by policymakers and researchers, but Celasun and Walliser (2008) differentiated between the two. According to the authors, volatility is an ex-post phenomenon. Predictability, on the other hand, is the difference between actual and expected disbursements of funds. For example, funds for large infrastructure projects are disbursed in lump amounts, making the monetary flows predictable, but volatile.

Volatility, unpredictability and pro-cyclicality of capital flows may stimulate financial crisis, and contribute to inappropriate project selection (Pycroft and Martins, 2009). In this regard, it is important to understand the adverse effects of aid volatility and unpredictability on economies. Celasun and Walliser (2008) suggested that, unexpected aid shortfalls can influence governments to cut investment, including on human capital, while aid windfalls can disproportionately boost government consumption (Hudson, 2015). Oftentimes, the necessary adjustments, followed by unexpected shortfalls in financial assistance, are severe for poor countries, which lack access to international capital markets. Lensink and Morrissey (2000) concluded that, macroeconomic effectiveness of aid is hurt by volatility.

Usually, developing countries are exposed to recurrent external shocks. They are also less capable of dealing with such adversities due to financial constraints and lack of effective policy tools. Estimates reveal that welfare cost of output volatility in Sub-Saharan Africa could be as high as 5–20 times higher than that in the USA (Bulíř and Hamann, 2003). In this backdrop, volatility of aid can further worsen the situation by affecting the financial abilities of a country. Hudson and Mosley (2008) found that, aid volatility decreases growth, but in a differentiating way; i.e. the effects were different for upside and downside volatility. Arellano et al. (2009) considered an inter-temporal, two-sector general equilibrium model to analyse the effect of aid volatility. They concluded that, aid volatility causes

significant welfare losses to consumers, which is approximately 8 per cent of the aid budget. In another study on 48 developing countries, Gemmell and McGillivray (1998) found that, aid shortfalls were followed by contractionary fiscal policies. Additionally, there is proof that, unpredictability may have an asymmetric impact, depending on the type of expenditure. For instance, windfalls might be used more for consumption, while shortfalls are supported by cutting investment in the recipient country (Pycroft and Martins, 2009).

The Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD), in 2005, developed the Progress Indicator 7 to evaluate whether the target of making aid more predictable is being achieved or not. The information revealed the existence of a significant inconsistency between the records of donors and recipient countries. For instance, donor records revealed that, 98 per cent of the aid scheduled for disbursement were spent in the beginning of 2010 (OECD, 2011). However, 15 per cent of the planned disbursements were for 60 per cent of aid-recipient countries, and 27 per cent were within 5 per cent (Hudson, 2013).

Change in disbursement patterns is justifiable by a major shift in country circumstances. Donors may withdraw committed aid to protect resources from being misused due to shifts in policy and governance in the recipient country. On the contrary, in order to ensure aid effectiveness, some assistance might have to be disbursed unexpectedly. For example, while emergency aid can be difficult to forecast, their addition improves efficacy at times of major economic shocks (Celasun and Walliser, 2008).

The aid pipeline represents the amount of aid guaranteed by donors, but not yet disbursed (Diarra, 2011). This is because the definitions of disbursement dates used by donors and recipient countries do not always match. Moreover, confusion about disbursement procedures often arises, which complicates temporal and cross-country comparisons. Additionally, predictability could be undermined due to policy conditions associated with aid. If the conditions are not met by the recipient countries, conditionality may result in lack of predictability by decreasing or delaying aid flows (Celasun and Walliser, 2008).

It is worth mentioning that volatility of aid affects aid utilisation. Greater transparency is, therefore, necessary for recipient country citizens, to be able to hold their governments accountable over any discrepancies between aid received and aid spent.

Policy conditionality, tied aid and donor proliferation

The issue of conditionality is not beyond dispute. Aid conditionality often limits recipient countries from utilising the funds for services, goods or works. The DAC of OECD has advocated development partners to provide untied aid with no exclusivity. In this regard, OECD has introduced a guideline for tied and partially tied ODA. This has led to a significant decrease in tied aid from 48 per cent in 1987 to 15 per cent in 2011 globally (Kim and Kim, 2016).

However, the study by Kim and Kim (2016) also found that, share of untied aid from Canada, Denmark, Finland and Netherlands stood at 70–88 per cent in 2007. Interestingly, the domestic firms in donor countries were recipient of all the contracts from the aid by these countries. Secondly, the authors also revealed that, on average, domestic firms of donor countries were awarded 60 per cent of all the contracts from DAC countries. Such characteristics of aid reveals that, untied aid still benefits domestic firms of donor countries.

Following the Burnside and Dollar (1997, 2004) hypothesis that had contended that aid is effective in fostering growth in countries with sound policies, the World Bank promoted the importance of good economic policies for poverty alleviation (Ravuvu and Thornton, 2016). The structural reform policies initiated in the 1980s and the 1990s were integrated into many developing countries, including Pacific Island economies, making them more dependent on the global economy. Despite massive inflow of ODA, the reforms resulted in repercussions in the form of political instability, monopolies, high cost of essential services, job losses, urban-centric growth and anti-globalisation protests (Ravuvu and Thornton, 2016).

After analysing three Latin American countries—Honduras, Bolivia and Nicaragua—Dijkstra (2011) concluded that, effectiveness of aid can only be ensured when ownership and partnership are promoted by donors. In a country study of Ghana, Pallas et al. (2015) investigated the proliferation of donors in the country's health sector between 1995 and 2012. It was found that, presence of myriad donors generated parallel administrative systems, and raised the transaction costs for the Ministry of Health and a public health service that were already suffering from low capacity. Regardless of the problems, the Ghanaian government was unwilling to refuse foreign assistance due to its weak fiscal position that emerged from high indebtedness. To mitigate the problems emerging from donor proliferation, both the government and donors promoted harmonisation and alignment. While the move decreased the government's transaction costs, the donors suffered from coordination costs and limited the government's room for negotiations. Nonetheless, harmonisation and alignment steps may have influenced donors to fund standalone projects to increase accountability.

To be eligible for debt relief and concessionary loans, the International Monetary Fund (IMF) advocated for the implementation of Poverty Reduction Strategy Papers (PRSPs) since 1999, claiming that the PRSP approach augments aid effectiveness. However, Dijkstra's (2011) critical examination of Honduras, Bolivia and Nicaragua found disappointing results. As such, there was limited country ownership in formulating the PRSPs, since it mostly was donor-driven. Additionally, both the government and donors were uninterested in extending the discussion to cover issues of land reforms, privatisation, or even the influence on the strategies themselves. The focus was rather on government spending on the social sectors.

Fungibility of aid

Among economists, there is a broad consensus that development assistance is at least partially fungible in two senses: (i) government spending does not always increase commensurately for each additional dollar in aid; and (ii) aid intended for specific sectors sometimes leaks to other sectors (World Bank, 1998). It has been argued (van de Walle and Mu, 2007) that, aid may also be fungible within sectors: for instance, aid in the road sector for a specific geographic location may be used to finance infrastructural development in other areas (Wagstaff, 2011). Sectoral fungibility is a concern, since the use of aid other than its intended purpose, is less productive or less socially useful (Pettersson, 2007).

In this connection, Wagstaff (2011) estimated the benefits of two simultaneous health projects in Vietnam, targetted on specific provinces funded by the World Bank. The analysis revealed that, there is some cost associated with fungibility, which reflects the diminishing returns to government spending, and the lower initial level of spending in project provinces. However, the author thought that this is not a big concern. On the other hand, Pettersson (2007) found mixed results; only through specification changes in his model, the author found non-fungible aid to be welfare-improving, and fungible and other aid to have no effect.

Data unavailability

The selection of variables, number of observations of such variables, and the choice of statistical models play a vital role in the determining the results of analysis. For example, since access to schooling, healthcare and transportation facilities are proxy indicators for the level of human welfare, these variables are emphasised throughout the aid effectiveness literature (Breitwieser and Wick, 2016). However, a significant number of missing data in individual variables can limit the number of observations, hurt the efficiency of analysis, and entail biased results. By analysing several studies, Ross (2006) found that, some missing observations had reduced the actual sample size during regression, even though these studies apparently had large sample sizes. Thus, it can be concluded that, such statistical methodologies can obtain different results when analysing the effectiveness of aid.

2.4 Summary of studies on aid effectiveness

The literature review presented in this paper indicates that, there is no universally accepted view on the role of foreign aid in economic growth. A large number of studies show that, foreign aid has had a positive effect. Some other studies have shown that, foreign aid has either negative or no effect on GDP growth of countries. Overdependence on donor assistance to counter macroeconomic imbalances has cost recipient countries a lot, since aid flows are volatile and unpredictable. Effectiveness of aid is conditional on factors, both in recipient and donor countries. Experience of aid-dependent countries also shows that, a high amount of aid is not necessarily more effective. Utilisation of a large amount of foreign aid could impinge on the absorption capacity of countries. Depending on the objective and utilisation pattern, even a small amount of aid can be effective. Majority of the studies argue that, foreign aid is effective in countries where macroeconomic policies are sound, and which have good governance. Still many argue that, aid can aid can be effective and promote growth, even without good policy environment. Thus, the issue of aid effectiveness is highly debated. There is no single conclusion on the role of aid in economic growth. Table 3 summarises a body of literature on the performance of aid-recipient countries.

Table 3: Findings on aid–growth nexus in various studies

Author(s)	Panel country	Study period	Major findings
Burnside and Dollar (1997, 2004)	56	1970–1993	Aid has little (positive) impact on growth (with condition)
Easterly, Levine and Roodman (2004)	62	1970–1997	Aid does not promote growth in good policy environments
Irandoost and Ericsson (2004)	5	1965–2000	Positive relationship between aid and economic growth
Mohey-ud-din (2005)	1	1960–2002	Aid has positive effect on GDP, but substitutes domestic savings and increases debt burden
Moreira (2005)	48	1970–1998	Aid had positive impact on economic growth, but has less effect on growth in the short-run, than in the long-run
Chirino, Valdivielso and Melián (2006)	96	1990–2003	ODA is not effective—not only in case of economic growth, but also in case of improving certain indicators of poverty
Duc (2006)	39	1975–2000	Aid has negative impact on growth in developing countries, except for South Asian countries
Karras (2006)	71	1960–1997	Foreign aid has positive, permanent and statistically significant impacts on economic growth
Ouattara (2006)	68	1980–2000	Aid positively affects developmental expenditures, and negatively affects non-developmental expenditures
Mallik (2008)	6	1965–2005 ^a	In the short-run, aid has no significant effect on economic growth, while long-run effect of aid on growth was found to be negative

(Table 3 contd.)

(Table 3 contd.)

Author(s)	Panel country	Study period	Major findings
Johansson (2010)	118	1989–2004	Reduction of the debt stock through debt relief does not generally translate into growth, except for middle-income countries
Unceta, Gutierrez and Amiano (2010)	63	1989–2008	Increase of ODA in absolute terms to the low-income countries diminished its ODA–GDP ratio
Gyimah-Brempong and Racine (2010)	77	1996–2004	External aid has a positive and significant impact on physical capital investment; and relationship varies with the aid measures (net aid disbursement to GDP and real per capita net aid inflow) and the policy environment
Rajan and Subramanian (2011)	15–32 ^b	1980–2000	Aid inflows have systematic adverse effects on a country's competitiveness
Bjerg, Bjørnskov and Holm (2011)	38	1960–2005	(i) Non-linear association between foreign aid and growth; and (ii) Foreign aid can alleviate negative effects of debt burdens
Guillaumont (2011)	LDCs		ODA: (i) is a major source of development finance in LDCs; (ii) is likely to facilitate migrant remittances; and (iii) has stabilising effect on structural vulnerability of LDCs
Gyimah-Brempong, Racine and Gyaopong (2012)	77	1995–2004	(i) Quadratic relationship between income growth and aid; and (ii) Positive and significant relationship between aid and physical capital investment
Lessmann and Markwardt (2012)	85	1980–2007	Foreign aid has a mixed impact on economic growth
Selaya and Sunesen (2012)	186	1970–2001	Aid invested in complementary inputs (social and economic infrastructure) draws in foreign direct investment (FDI), while aid invested in physical capital crowds it out

Source: Compiled by the authors from various studies.

Note: (a) Central African Republic: 1977–2004; Malawi: 1965–2005; Mali: 1965–2005; Niger: 1965–2005; Sierra Leone: 1970–2005; Togo: 1980–2004; (b) 32 countries for the 1980s, and 15 countries for the 1990s.

3. SDGs AND FINANCE: DYNAMICS OF FOREIGN AID IN BANGLADESH

While Bangladesh's economic and social progress has been impressive on many counts, the country needs to deal with several challenges, and make its growth and poverty reduction efforts sustainable, in order to move forward towards a developed country. Experience of many countries suggest that, countries which lack the ability to sustain the momentum of their economic performance, may fall into the 'middle-income trap' (Kharas and Kohli, 2011). In this regard, Bangladesh will need to make efforts to ensure good governance, strong institutions, rule of law, transparency, accountability and better public sector management (Rahman and Bari, 2016). At the same time, Bangladesh needs to continue its achievements in three graduation criteria in the coming years to finally achieve the developing country status. Indeed, to maintain the sustainability of this progress, Bangladesh will have to graduate with momentum. Such momentum is required for smooth graduation, so that Bangladesh can overcome the pitfalls of graduation, and continue its advancement during post-graduation period, and also can sustain the graduation.

Given its trend in economic and social progress and success in achieving the MDGs, it is expected that, Bangladesh will be able to implement the SDGs successfully, particularly in the areas such as poverty reduction, gender parity in school enrolment, and reduction in child and maternal mortality. However, the 2030 Development Agenda is vast and multidimensional. In addition to commitment at the highest political level, achievement of the SDGs will require addressing the existing and emerging challenges. There are challenges of inequality, vulnerability to climate change, resource mobilisation, data deficiency, institutional weaknesses and lack of good governance. Indeed, strong institutions and good governance are the pillars of implementing the SDGs successfully, which is captured in SDG 16

(Peace, Justice and Strong Institution). Thus, in one sense, smooth graduation to UMIC, as well as developing country status, is linked to the implementation of the SDGs. How Bangladesh can graduate smoothly to the UMIC and developing country status, and whether Bangladesh will be able to move forward towards a high-income and developed country will hinge upon how the country performs in case of SDG implementation, and how it ensures good governance through better accountability, predictability and transparency of development activities.

The concept of governance has gained prominence in the development discourse since the 1990s. It is considered as a key component for development strategies to be successful and more effective for the broader section of population. Studies have indicated that lack of good governance can hinder investment and growth, and can aggravate poverty and inequality in countries (Grindle, 2004). Political, economic and institutional—all dimensions of governance have implications for economic growth, poverty eradication and income inequality. Without good governance, the ability of governments to formulate and implement sound policies that are participatory, pro-poor, accountable and transparent—becomes constrained.

The GoB has estimated that an amount of USD 928.48 billion will be required for implementation of the SDGs at constant 2015-16 prices during the period of FY2016-17 to FY2029-30. This is 19.75 per cent of the accumulated GDP under the Seventh Five Year Plan (7FYP) of Bangladesh. The study has also identified sources of finance for SDG implementation under broad areas, such as public, private, public–private partnership, foreign direct investment (FDI), foreign aid and grants, and non-government organisations (NGOs) (GED, 2017). This implies that Bangladesh will have to put effort to mobilise resources for its development from a host of sources such as taxation, private and foreign investment, export and remittances. This calls for much more effort on the part of the government.

3.1 Major trends in foreign aid in recent periods

Bangladesh was an aid-dependent country after its liberation in 1971. However, over time, the country has emerged as an economy oriented towards international trade in goods and services. Compared to the beginning of the 1980s, ODA as a share of GDP of Bangladesh has declined steadily and significantly. For example, the share of ODA in Bangladesh's GDP has reduced to 1.4 per cent in 2017, compared to 5.8 per cent in 1981 (MoF, 2019). Indeed, the economy of Bangladesh has been integrating itself into the global economy through higher trade, remittances and FDI. Between 1981 and 1991, less than one-fourth of the economy was connected with the global economy. In 2017, about 40 per cent of the economy was integrated with the world, largely due to its shift towards trade dependency.

As a matter of fact, the development efforts in Bangladesh have been supported by two parallel efforts when it comes to generation of resources from external sources. The first one is the market access provided to exports from Bangladesh. The second one is the concessional foreign aid to deal with critical issues, such as education and health. The role of foreign aid in achieving a number of targets of the MDGs during 2000–2015 cannot be undermined. Foreign aid had also contributed towards fulfilment of the agenda laid out in the donor-driven PRSPs. Moving forward, the need for foreign aid in implementing the SDGs may also be felt equally. However, given the changing landscape of foreign aid globally, the dynamics of foreign aid in Bangladesh economy may also change. Over the last four decades, Bangladesh has experienced changes in foreign aid in terms of its composition, sectoral focus and sources. The following section provides a brief overview of the key features of foreign aid in Bangladesh.

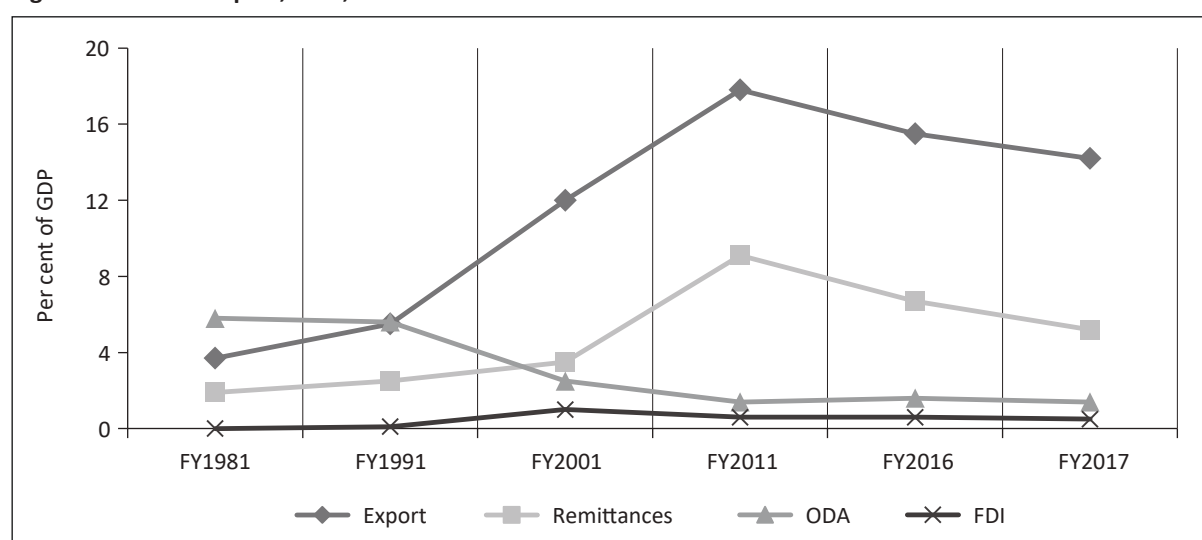
Although Bangladesh has made commendable economic and social progress since its inception, due to the country's budgetary constraints, there is still a need for external financial support from development

partners. In this regard, development partners have been extending support to Bangladesh, mostly focused towards sectors crucial for achieving socioeconomic development. These include education, health, transport, power, urban development and finance.

Annex Table 1 shows the summary of 20 major development partners of Bangladesh during the period FY1971-72 to FY2016-17. During this period, Bangladesh has received nearly USD 73 billion dollars in assistance. Almost two-thirds of the assistance is in the form of loans. The World Bank, having disbursed over USD 18 billion during the aforementioned period, has been Bangladesh's largest multilateral donor. Despite the increase in the total volume of ODA, its volume as a share of GDP and Annual Development Programme (ADP) has been declining steadily. On the contrary, exports and remittances (as percentage of GDP) have increased significantly since the 1980s (Figures 2 and 3).

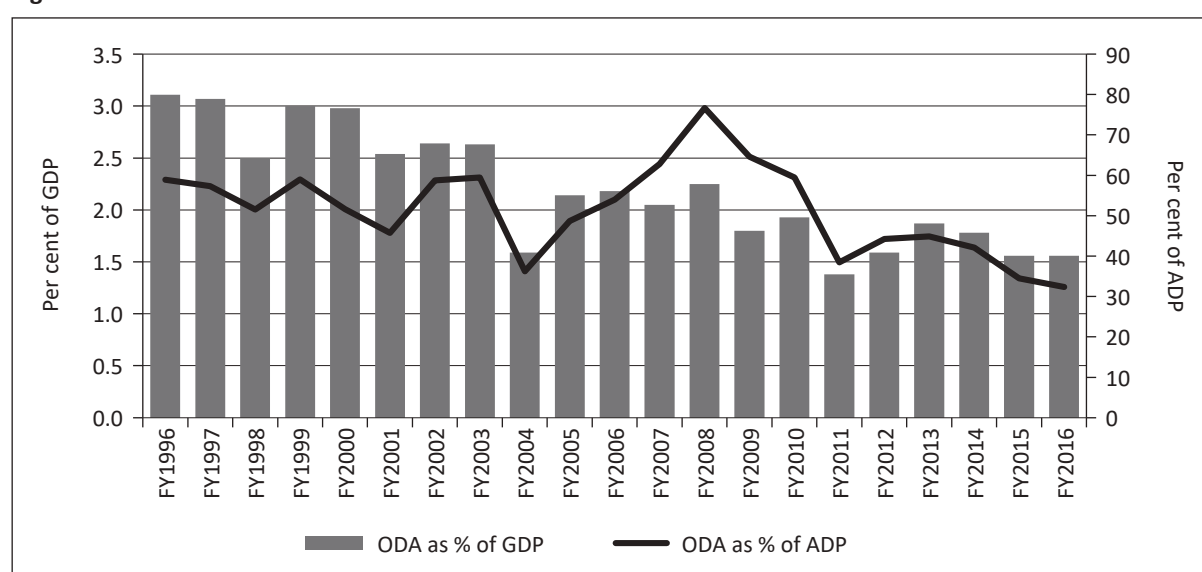
The composition of aid reveals changing trends over time, as illustrated in Figure 4. Project aid as a share of total aid has been increasing since FY1998-99. Strikingly, project aid now comprises 100

Figure 2: Share of export, ODA, remittance and FDI in GDP

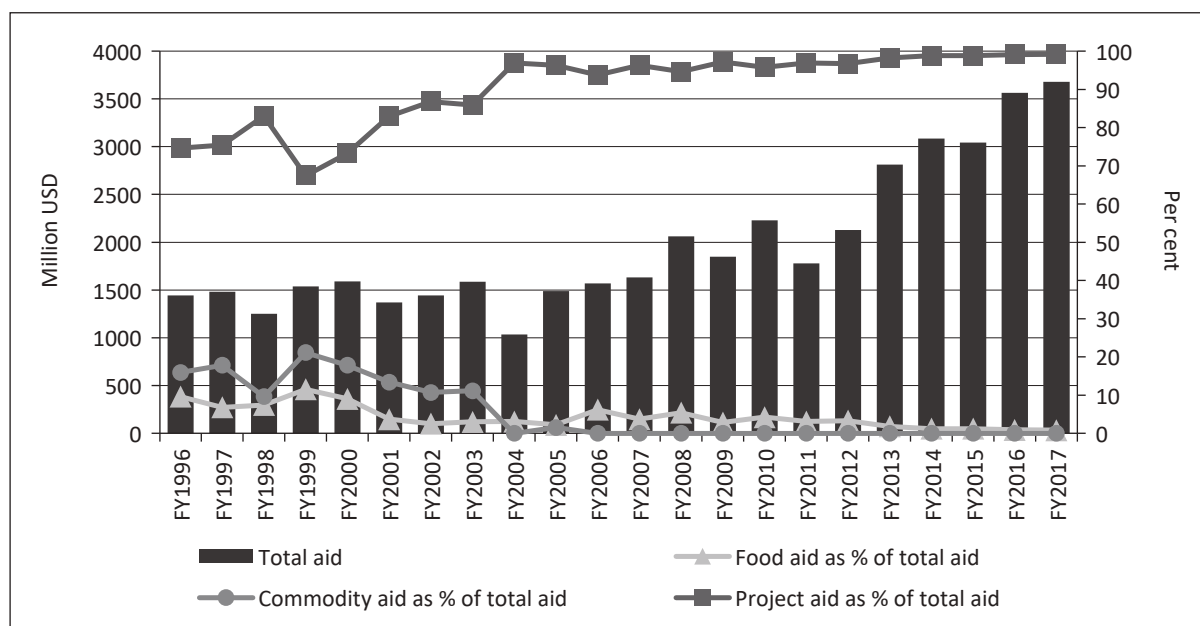


Source: Authors' illustration based on MoF (2019).

Figure 3: Share of ODA in GDP and ADP



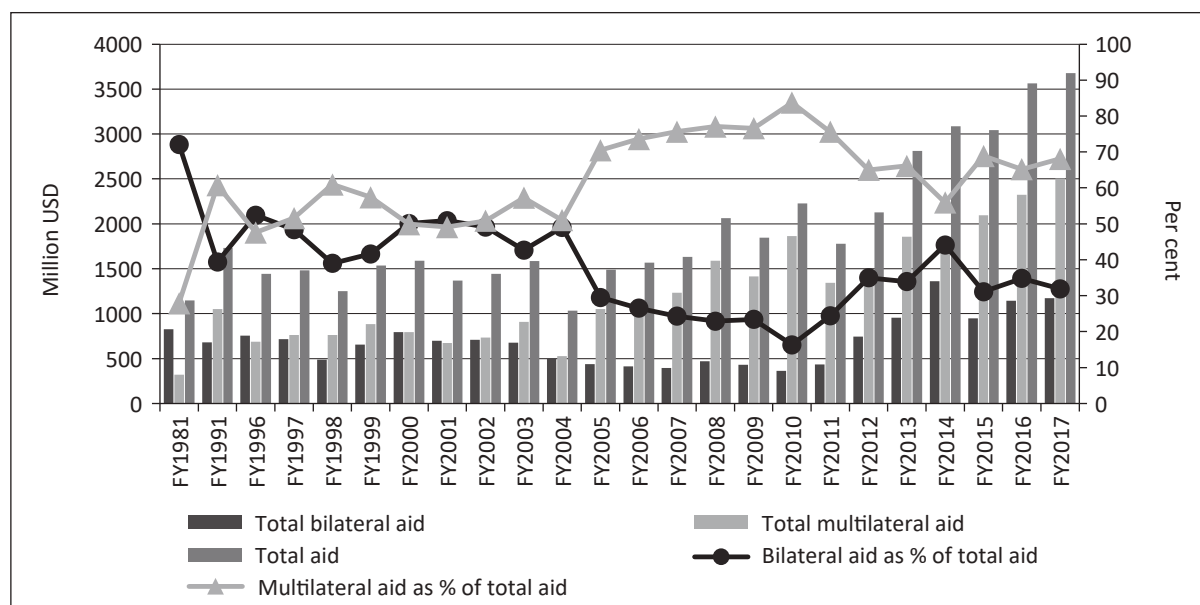
Source: Authors' illustration based on MoF (2019).

Figure 4: Trends in food, commodity and project aids

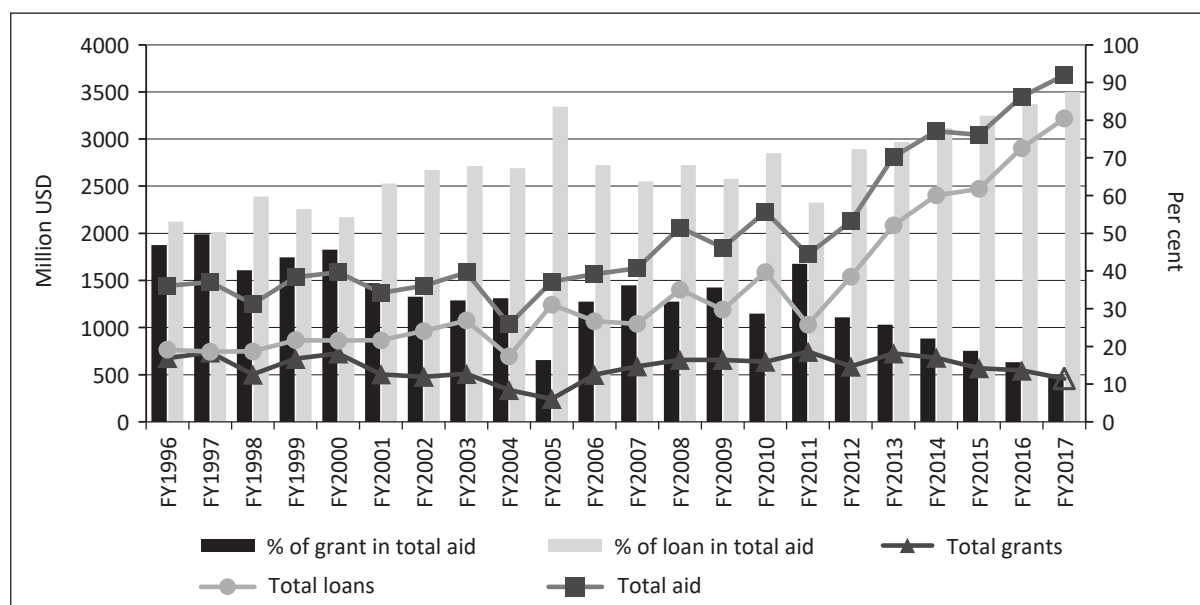
Source: Authors' illustration based on MoF (2019).

per cent of total aid. On the other hand, commodity aid as a share of total aid has been close to zero since FY2003-04. Commodity aid used to provide resources to finance imports and government expenditures that are not tied to any specific project (CPD, 2003). Following a downward trajectory, food aid as a share of total aid, has been decreasing since FY2005-06.

With high growth, the dependency on commodity and food aid has reduced. That is, the country has managed to purchase commodity and food on its own. Additionally, the country now has more capacity to implement projects with foreign aid. There is a considerable gap between bilateral and multilateral aid. As Figure 5 indicates, bilateral aid as a share of total aid has been decreasing, while multilateral aid as a share of total aid has been increasing since FY2003-04. Although the gap between the two sources of aid closed down in FY2013-14, it has been increasing since then. Top two sources of multilateral aid to Bangladesh are The World Bank and the Asian Development Bank (ADB). Their

Figure 5: Bilateral and multilateral aid disbursements

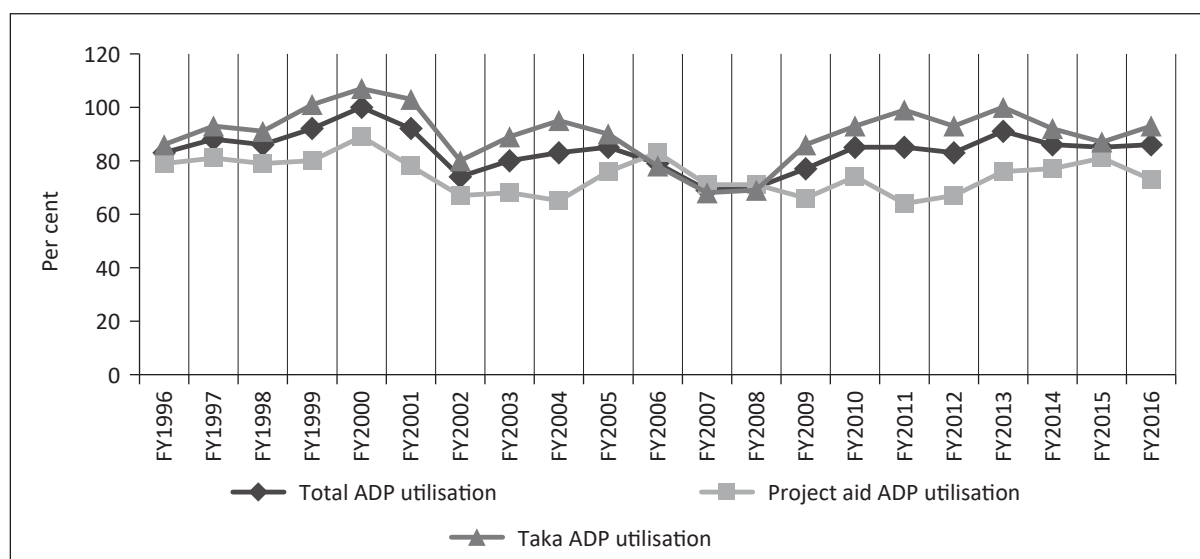
Source: Authors' illustration based on MoF (2019).

Figure 6: Share of grant and loan in total aid

Source: Authors' illustration based on MoF (2019).

collective contribution during FY1971-72 to FY2016-17 was USD 31,019 million, which was 42.57 per cent of total aid to Bangladesh during the said period. Both donors had provided more loans than grants. While World Bank and ADB provide most aid in the form of loan, the other donors had slightly higher amount of grant, which makes the average composition of grant and loan as 37 per cent and 63 per cent, respectively (Figure 6 and Annex Table 1).

As illustrated in Figure 7, utilisation of Taka allocation of ADP exhibits an increasing trend since FY2007-08. However, utilisation of project aid has been below 80 per cent from FY2005-06 onwards. Low utilisation of aid is a perennial problem. This is a reflection of low absorption capacity of the country. This also reveals the weak institutional capacity in aid-supported project implementation. Hence, a large amount of aid continues to remain in the pipeline. This limits the opportunity to receive more aid (detailed discussion in Section 6).

Figure 7: ADP utilisation

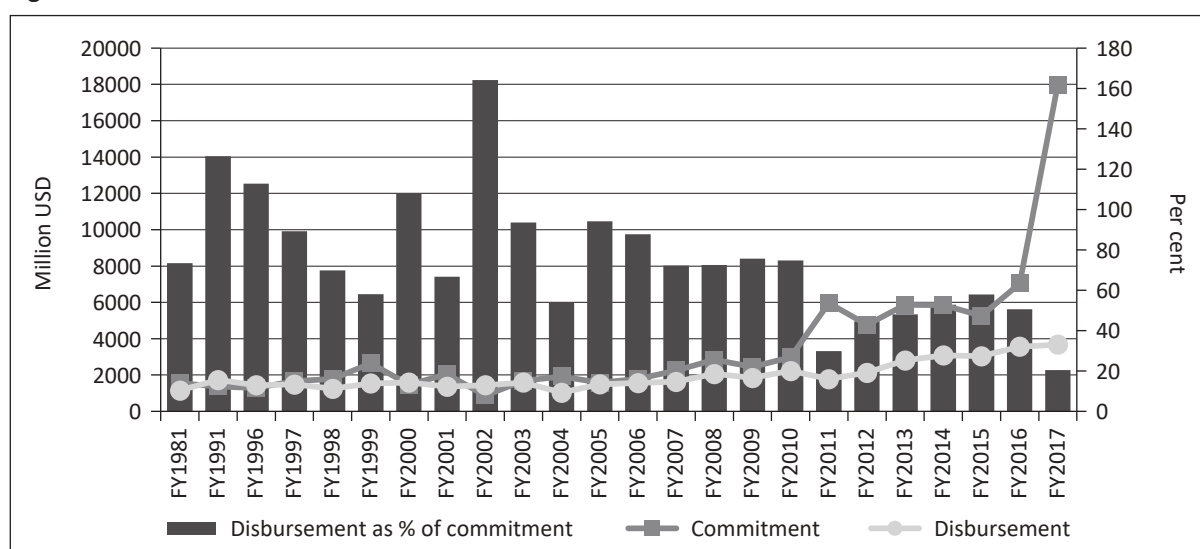
Source: Authors' illustration based on MoF (2019).

This implies that, Bangladesh has been pursuing costly sources of external funds to finance its development. Though Bangladesh is still an LDC, the country has already graduated from low-income country to an LMIC according to World Bank categorisation. Thus, Bangladesh cannot access cheaper loans from World Bank any more.

However, there is a large variation between commitment and disbursement of aid. Much of the commitments made by donors have not been met. After FY2004-05, none of the commitments were fulfilled by the donors, and the gap between commitment and disbursement has been widening since then. Commitment spiked in FY2010-11, and soared in FY2016-17, while disbursement has been rising steadily since FY2010-11. A large difference between commitment and disbursement is seen in FY2016-17, as a result of high commitment and low disbursement (Figure 8).

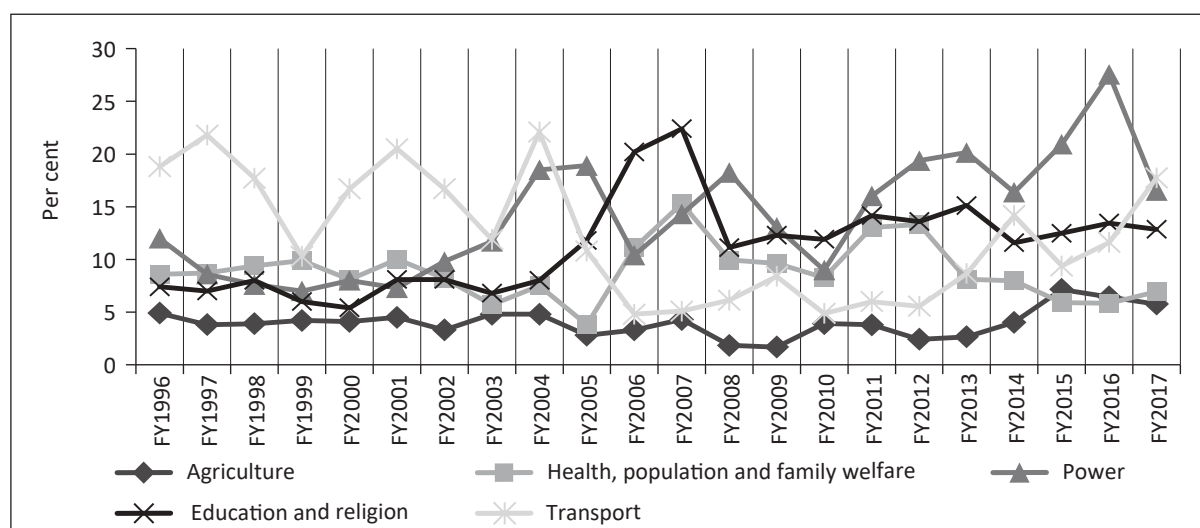
Looking into aid disbursement in several selected sectors, particularly agriculture, population and family welfare, education, health and power, aid disbursement in infrastructure exceeds that of social sectors. There has been a sharp increase in aid disbursement in the power sector since FY2009-10. Some other striking trends, as captured in Figure 9, shows that, aid disbursement in the transport

Figure 8: Aid commitment and disbursement



Source: Authors' illustration based on MoF (2019).

Figure 9: Aid disbursement in selected sectors as percentage of total ODA

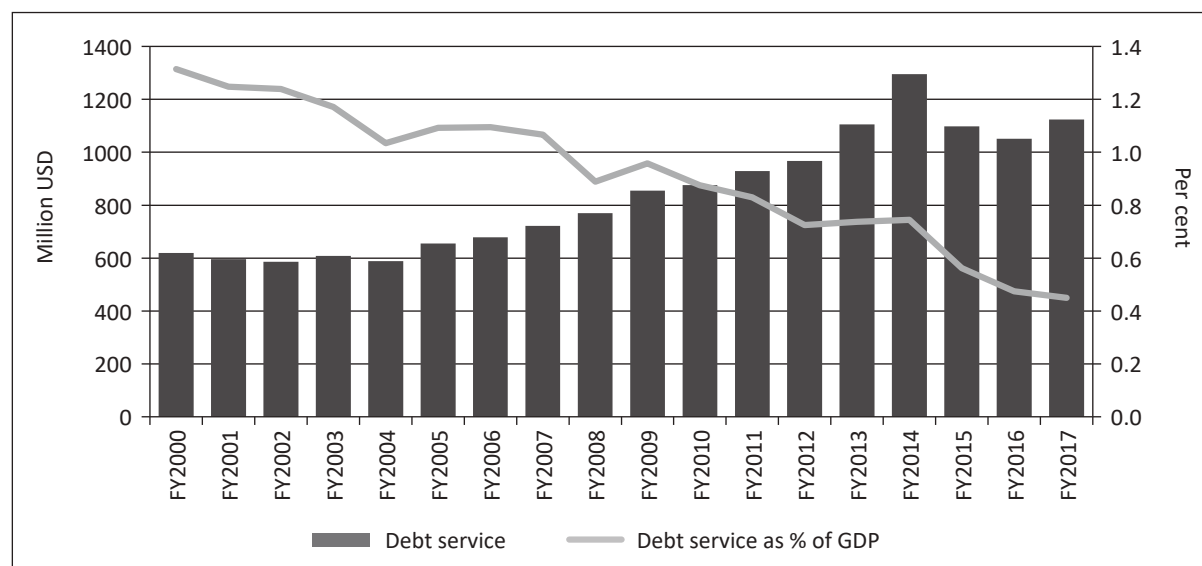


Source: Authors' illustration based on MoF (2019).

sector exceeded that of education in FY2016-17. Hovering at around 5 per cent, the agriculture sector maintained relatively greater stability, but it is lower than that of health and power sectors. The relative importance on infrastructure by the GoB in view of infrastructural deficit due to low private and foreign investment is reflected through sectoral disbursement of aid.

Given the fact that foreign loans are to be serviced with foreign exchange, management of external debt is very important. Per capita debt obligation of Bangladesh has risen from USD 6.59 in FY1973-74 to USD 198.27 in FY2016-17 (MoF, 2019). Debt service as percentage of GDP has been declining consistently since FY1999-00, reaching its lowest in FY2016-17 (Figure 10).

Figure 10: External debt as percentage of GDP



Source: Authors' illustration based on MoF (2019).

Note: (i) Base year for 2000–2012 is 1995-96; (ii) Base year for 2012–2017 is 2005-06.

4. CHALLENGES OF AID UTILISATION IN BANGLADESH

During the period of the MDGs, GoB managed to receive external support to implement the MDGs successfully. For example, compared to 2000, the flow of external resources increased by 1.9 times in 2015 (MoF, 2017a). However, aid is still not fully utilised in Bangladesh. According to the Aid Effectiveness Unit under the Economic Relations Division (ERD) of MoF, aid effectiveness in Bangladesh is performing less than its potential due to a number of interlinked and interdependent structural, procedural and capacity problems (ERD, 2011). This is reflected through low implementation of the ADP each year. Major reasons for low ADP implementation include institutional weakness, delayed implementation and cost overrun (CPD, 2010; 2018b). Procedural lapses of a project, incomplete proposal, illogical expenditure target and inadequate feasibility study also reduce the implementation of ADP. Due to procedural delays in land acquisition and procurement after approval, projects cannot take off. By the time the project activities start, spending the allocation for the full fiscal year becomes difficult.

The Aid Effectiveness Unit of the ERD also pointed out that the existing mode of operation is not conducive to promoting creativity and results-based outcomes. The institutional structure lacks decentralisation, which adversely affects coordination between government agencies (that are involved in budget planning and implementation) and donors (ERD, 2011). Hence, these obstacles within the relevant ministries in Bangladesh render inefficient utilisation of aid, along with the challenges from the donors. A number of challenges were identified by the Ministry of Planning of the GoB. In terms of ADP implementation, the following obstacles were identified: (i) recruitment of project director and

acquisition of land; (ii) recruitment of consultant/firm; (iii) preparation of work plan; (iv) recruitment of human resources (IMED, 2017).

Though the above observations were made a few years back, they are still relevant in the present circumstances. Review of existing studies and discussions with experts reconfirms the issues related to aid utilisation in Bangladesh. Some of the key factors for low aid utilisation are discussed below:

Project design and implementation

Difficulties in project implementation start from the designing phase of projects. The line ministries try to get their concerned projects included into the ADP, so that approval and funding of their projects are ensured. The required Development Project Proformas (DPPs) are prepared to satisfy the minimum requirements to approve the projects. It is only during the project implementation, that flaws in project design are identified. Then there would be a call for revising the DPP, which goes through several rounds of bureaucratic process in order to finalise the document.

One of the most important elements of project implementation is land acquisition. However, this does not receive due attention during the designing phase. It takes several years to settle disputes during land acquisition. As a result, project implementation period is extended. Once the project is ready to get started, appointment of project director and project management team become challenging.

Bureaucracy among donors and GoB

The structure of the decision-making process poses another challenge. The recipient country and the donors have their own policies regarding the use of funds. Hence, there is a lot of reluctance on part of the donors to align their policies with the recipient country's policies. Moreover, the procurement procedure involves a committee, which makes the decision regarding purchase of goods. This committee, comprising top ministers, makes decisions on purchases, and this tends to be a lengthy process.

Irrespective of aided or non-aided projects, there are significant cost overruns in Bangladesh, because projects take a long time to be completed. Table 4 provides a picture of cost and time overrun of major projects in Bangladesh. With time, the costs escalate, making potential benefits more expensive.

Table 4: Cost and time overrun of major projects

Project	Cost (Crore BDT)			Timeline (Years)		
	Initial cost	Revised cost	Increase (%)	Planned	Revised (expected date of completion)	Increase (%)
Padma Multipurpose Bridge	10162	28793	183.3	7	10	42.9
Joydebpur-Mymensingh Road Improvement Project (JMRIP)	902	1815	101.2	3	6	100.0
Developing Port Infrastructure/Support Facilities of Payra Port for Commencing Port Operations	1128	3506	210.8	3	5	66.7
SASEC Road Connectivity: Improvement of Joydebpur-Chandra-Tangail-Elenga Road (N-4) to 4-Lane Highway	2788	3365	20.7	6	7	16.7

(Table 4 contd.)

(Table 4 contd.)

Project	Cost (Crore BDT)			Timeline (Years)		
	Initial cost	Revised cost	Increase (%)	Planned	Revised (expected date of completion)	Increase (%)
Support to Dhaka Elevated Expressway Public Private Partnership Project	3217	4869	51.4	4	10	150.0
Dhaka-Chittagong Railway Development Project	1151	2138	85.7	7	12	71.4
Construction of Bibiana-3, 400 MW Combined Cycle Power Plant	3358	3358	0.0	3	6	100.0
Shikalbaha Dual Fuel 225 MW Combined Cycle Power Plant	2008	2008	0.0	4	6	50.0
School Feeding Programmes in Poor and Distressed Areas (SFP)	1143	4992	336.8	4	11	175.0
Physical Infrastructure Development for Selected Private Secondary Schools (PIDSPSS)	2115	2253	6.5	3	7	133.3

Source: Adapted from CPD (2018a, 37).

Note: MW: Megawatts.

There are several reasons for such ineffective implementation of projects, especially under the ADP. First, the current fiscal calendar coincides with the rainy season. Since a lot of infrastructural work is undertaken in the rainy season, the quality of work suffers. Second, it takes a considerable amount of time to get the work order of the projects after the approval of budget. During the delay, material costs are likely to rise, and the person who had submitted the tender may back out. And by the time contracts are handed out, the implementing agency does not have enough time to complete the project. Third, many development projects with one-year timeframe, in reality take more than one year to complete. Moreover, it takes a long time to process the bills for the contractors due to multiple layers of bureaucracy. This demotivates reputed domestic contractors and foreign companies to work on projects. Instead, poor-performing contractors are hired by the ministries to implement their projects in many cases. Finally, there is institutional ineptness which hurts the implementation process. Apart from frequent change of project directors, the officials are also overburdened with multiple projects. Selection of the right person as the project director with required skills is also a big challenge.

Project management

Government officials involved from the beginning of a project are rarely able to complete projects, as they are transferred to other departments or ministries. To deal with complex procurement and other project-related issues, experienced and trained officials are required. Though they are provided training on public administration, practical skills related to project management cannot be taught, as they are very much specific to the sector. Since the officials are transferred from one ministry to another, they cannot utilise their training and contribute towards effective project implementation.

Conditionalities and misalignment

Due to conditionalities attached to aid, utilisation of aid to its full potential becomes difficult. Because of donors' procurement policies, which require floating tender and securing final approval from their

offices, a significant amount of time elapses. This delays project implementation. Of course, regulatory requirements vary from donor to donor. Some donors have stringent laws on rent-seeking, while others have relatively flexible laws, which may create opportunity for malpractices. Besides, there are also problems with regard to alignment and harmonisation of the roles and activities of the line ministries and the ERD of the GoB.

Capacity constraints

While the capacity of project implementation-related activities is supposed to improve after repeated exposure to such activities, unfortunately absorptive capacity of the country continues to remain low. There is a lack of aid utilisation within the government. Those who develop expertise through experience, are often transferred to other ministries. Only the economic cadre officials have remained more or less within the designated ministries.

Country systems

Although the use of technology has improved the country systems, complicated processes exist in some cases, which are time-consuming. Delay in bill payment to contractors can complicate the process, if payment is not made within the specified fiscal cycle. It then requires extensive paperwork, after which, bureaucratic procedures delay the disbursement of the money.

Achievement of key performance indicators

Most donors have a three- or four-year plan, which gives an indication of the likely allocation over the next three years or so. In preparing that plan, they consult with GoB officials as necessary. Despite this, disbursement remains a problem, and it has not improved much. This is also related to the administrative incompetence of the GoB officials. Several donor projects in Bangladesh are performance-based, where fund disbursement depends on achievements of Key Performance Indicators (KPIs). Domestic agencies have an important role in improving KPIs, by complying with the procedures.

Monitoring and evaluation

The Implementation Monitoring and Evaluation Division (IMED) of the Ministry of Planning has traditionally been monitoring monetary flows. However, IMED has to perform a bigger role in terms of monitoring the quality and timely delivery of work. In order to do that, technical capacity of the Division has to be improved. In the short-term, such limitations can be overcome through hiring consultants with competence in project evaluation and implementation.

Transparency and accountability

Over time, transparency and accountability in project implementation have improved mostly due to pressure from donors. However, there are scopes for improving transparency in case of audit and evaluation reports. There could also be periodic reviews of completed projects. The problem lies with the incentive mechanisms. Capable officials with sound technical and administrative knowledge should be assigned for the job. They should also be rewarded with appropriate incentives.

5. CONTRIBUTION OF ODA TO GROWTH IN BANGLADESH

In this section, an empirical analysis has been conducted using several macroeconomic indicators to assess the contribution of aid in the economy of Bangladesh. The exercise is based on the annual

time series data of Bangladesh from 1996 to 2017. Data were collected from the World Development Indicators (WDI) and the Worldwide Governance Indicators (WGI) databases of the World Bank. Two equations are estimated: one is a log-linear model, and the other is a log-log model. The dependent variable is GDP per capita, measured as the annual percentage growth rate of GDP per capita based on constant 2010 USD (United States Dollar). The independent variables are: annual growth rate of gross capital formation, growth rate of labour force, net ODA received, broad money supply, policy index and institutional quality index.

The policy index is a composite index, calculated by regressing GDP per capita on inflation, government consumption and trade, and using the estimated coefficients as weights. This procedure is detailed as follows:

Step 1: Regress GDP per capita on inflation, government consumption and trade

$$GDP \text{ per capita} = \alpha_0 + \alpha_1(\text{inflation}) + \alpha_2(\text{government consumption}) + \alpha_3(\text{trade})$$

Step 2: Use the estimated coefficients as weights to make a composite policy index

$$Policy \text{ index} = \widehat{\alpha}_0 + \widehat{\alpha}_1(\text{inflation}) + \widehat{\alpha}_2(\text{government consumption}) + \widehat{\alpha}_3(\text{trade})$$

The institutional quality index is a composite index, calculated by regressing GDP per capita on control over corruption, government effectiveness, political stability, regulatory quality, voice and accountability, and rule of law, and using the estimated coefficients as weights. This procedure is detailed as follows:

Step 1: Regress GDP per capita on control over corruption, government effectiveness, political stability, regulatory quality, voice and accountability, and rule of law

$$\begin{aligned} GDP \text{ per capita} &= \beta_0 + \beta_1(\text{control over corruption}) + \beta_2(\text{government effectiveness}) \\ &+ \beta_3(\text{political stability}) + \beta_4(\text{regulatory quality}) \\ &+ \beta_5(\text{voice and accountability}) + \beta_6(\text{rule of law}) \end{aligned}$$

Step 2: Use the estimated coefficients as weights to make a composite institutional quality index

$$\begin{aligned} Institutional \text{ quality index} &= \widehat{\beta}_0 + \widehat{\beta}_1(\text{control over corruption}) + \widehat{\beta}_2(\text{government effectiveness}) \\ &+ \widehat{\beta}_3(\text{political stability}) + \widehat{\beta}_4(\text{regulatory quality}) \\ &+ \widehat{\beta}_5(\text{voice and accountability}) + \widehat{\beta}_6(\text{rule of law}) \end{aligned}$$

A squared term for aid is included in order to check if the relationship between aid and economic growth depends on the level of aid. The variables used in this study and their definitions are summarised in Table 5.

If the variables in a regression model are random walks or near random walks, then the regression might be spurious (Granger and Newbold, 1974). Such variables are said to be non-stationary, and contain a unit root or a stochastic trend. Models constructed with these variables often have high goodness of fit, but owing to the strongly auto-correlated errors, however, they cannot be used to conclude any true relationships. A spurious regression has a high goodness of fit and t-statistics, that seem to be significant. Nevertheless, the results of such a regression have no economic meaning

Table 5: Variables (for aggregate analysis)

Variable	Definition
GDP per capita	Annual percentage growth rate of GDP per capita based on constant 2010 USD
Investment	Annual growth rate of gross capital formation based on constant 2010 USD
Labour	Growth rate of labour force (people aged 15 and older who supply labour for the production of goods and services during a specified period)
Aid	Net ODA received as percentage of GNI
Aid squared	Squared aid term
Broad money supply	Broad money supply as percentage of GDP
Policy index	Policy index (composed of inflation, government consumption and trade)
Institutional quality index	Institutional quality index (composed of control over corruption, government effectiveness, political stability, regulatory quality, voice and accountability and rule of law)
Inflation	Logarithm of inflation rate plus one
Government consumption	Government consumption relative to GDP
Trade	Exports plus imports relative to GDP
Control over corruption	Control over corruption index
Government effectiveness	Government effectiveness index
Political stability	Political stability index
Regulatory quality	Regulatory quality index
Voice and accountability	Voice and accountability index
Rule of law	Rule of law index

Source: Authors' compilation.

(Enders, 2015). Under such circumstances, it is recommended to take first differences of any series with highly auto-correlated errors, in order to obtain estimates that are more efficient (Granger and Newbold, 1974). In order to check for unit roots in the variables, augmented Dickey-Fuller and Phillips-Perron unit root tests of the variables at level and at first difference were conducted.

The augmented Dickey-Fuller test (Dickey and Fuller, 1979; 1981) constitutes of estimating one or more equations using ordinary least squares (OLS), in order to obtain an estimated value for the coefficient of interest, γ , and the associated standard error. Comparison of the subsequent t-statistic with the corresponding value reported in the Dickey-Fuller results enables to decide whether to reject or not to reject the null hypothesis of $\gamma = 0$. The unit root can be detected using the Dickey-Fuller statistic. If the model has no intercept or trend, then the τ statistic is used; if the model has an intercept, then the τ_μ statistic is used; and if the model has both an intercept and a trend, then the τ_τ statistic is used (Enders, 2015). The augmented Dickey-Fuller test uses the p^{th} order autoregressive process defined as:

$$\Delta y_t = a_0 + \gamma y_{t-1} + \sum_{i=2}^p \beta_i \Delta y_{t-i+1} + \varepsilon_i$$

where,

$$\gamma = -\left(1 - \sum_{i=1}^p a_i\right) \text{ and } \beta_i = -\sum_{j=1}^p a_j$$

The null hypothesis is that the variable contains a unit root. The alternative hypothesis is that the variable was generated by a stationary process. If $\gamma = 0$, then the null hypothesis that the variable has a unit root, cannot be rejected. The augmented Dickey-Fuller test assumes that, the errors are uncorrelated with each other, and have constant variance.

For robustness check, in addition to the augmented Dickey-Fuller unit root test, the Phillips-Perron unit root test was also conducted. The Phillips-Perron test (Phillips and Perron, 1988) is non-parametric unit root test that modifies the test statistics after estimation, in order to consider the effect of auto-correlated errors. This procedure allows for drawing valid inferences from large samples without estimating additional parameters in the regression model (Banerjee et al., 1993). The error term in the Phillip-Perron test regression model does not follow a white-noise process.

Whilst a stationary process has a mean and variance that is constant over time, a non-stationary process has a mean and variance that may change over time. Hence, a non-stationary process may exhibit a stochastic trend over time. If the first difference of a non-stationary process is stationary, then it is said to be integrated of the first order, or $I(1)$. When a linear combination of multiple $I(1)$ time series is stationary, they are said to be cointegrated (Engle and Granger, 1987). Cointegrated time series are in long-run equilibrium, and tend to move together over time. In other words, cointegration is the degree to which two values are sensitive to the same mean over a given time period. Two time series are said to be cointegrated, if their linear combination is stationary. Therefore, testing for cointegration is effectively equivalent to testing for a long-run association between variables. Cointegration, however, does not indicate the direction of the relationship between two time series. Once cointegration between the variables considered in the model is confirmed, it is possible to proceed to causality analysis. To check if there is any long-run association between the variables used in this study, Johansen cointegration test was conducted.

The Johansen cointegration test checks the number of cointegrating equations, ' r ', in a VECM. The test utilises a maximum likelihood estimator of the parameters of a VECM, developed by Johansen (Johansen, 1995). The VECM is defined as:

$$\Delta y_t = \alpha \beta' y_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta y_{t-i} + \epsilon_t$$

where,

$y = (K \times 1)$ vector of $I(1)$ variables

α and $\beta = (K \times r)$ parameter matrices with rank $r < K$

$\Gamma_1, \dots, \Gamma_{p-1} = (K \times K)$ matrices of parameters

$\epsilon_t = (K \times 1)$ vector of normally distributed and serially uncorrelated errors

The Johansen cointegration test involves two likelihood ratio tests based on test statistics, known as trace statistic and maximum eigenvalue statistic. In the trace statistic test, the null hypothesis is that, the number of cointegrating relationships is equal to or less than the number of cointegrating equations in the VECM. The alternative hypothesis of the trace statistic test is that the number of cointegrating relationships is greater than the number of cointegrating equations in the VECM. In the maximum eigenvalue test, the null hypothesis is that, the number of cointegrating relationships is equal to the number of cointegrating equations in the VECM, and the alternative hypothesis is that, the number of cointegrating relationships is one greater than the number of cointegrating equations in the VECM.

When two variables are cointegrated, they will also have a causal relationship between them in at least one direction (Engle and Granger, 1987; Lütkepohl and Krätzig, 2004). Therefore, causality analysis is conducted using a Granger causality test. The Granger causality test (Granger, 1969) checks the ability of past values of one time series to predict the future values of another time series. Granger's definition of causality, was based on his two fundamental principles: (i) the effect does not precede

its cause in time; (ii) the causal series contains unique information about the series being caused that is not available otherwise (Granger, 1969; 1980). Therefore, Granger causality implies ‘predictive causality’, rather than true causality in the philosophical sense. This is because of the ‘post hoc ergo propter hoc’ (before this, therefore because of this) fallacy, which states that, temporal sequence of events does not necessarily signify that, events that occur first, are causes of events that occur later.

These tests are followed by regression analysis using the technique of dynamic ordinary least squares (DOLS) (Stock and Watson, 1993). The DOLS estimator was chosen since it is consistent and asymptotically efficient, even if the independent and dependent variables are cointegrated. The general specification of the DOLS model is as follows:

$$Y_t = \beta_0 + \theta X_t + \sum_{j=-p}^p \delta_j \Delta X_{t-j} + u_t$$

where, ΔX_{t-p} = value of independent variable X, lagged P units in the past, X_t = value of the independent variable X at time t, ΔX_{t+p} = value of independent variable X, lagged P units in the future.

If the dependent and independent variables are cointegrated, then they have a shared stochastic trend. Under such circumstances, the DOLS estimator is especially useful, since it is consistent, even if the independent variables are endogenous.

Results

The results of the Granger causality tests show that, the probability of the null hypothesis that ‘aid does not Granger cause GDP per capita’ being true is 0.5875 for the log-linear model, and 0.5699 for the log-log model. This means that, the null hypothesis that ‘aid does not Granger cause GDP per capita’ cannot be rejected. Similar results are also observed for the null hypothesis of ‘aid squared does not Granger cause GDP per capita’ (Table 6).

Table 6: Results from Granger causality test

Null Hypothesis	Model	
	Log-Linear ⁽ⁱ⁾ F-Statistic (Probability)	Log-Log ⁽ⁱⁱ⁾ F-Statistic (Probability)
Aid does not Granger cause GDP per capita	0.55255 (0.5875)	0.58541 (0.5699)
Aid squared does not Granger cause GDP per capita	0.50202 (0.6158)	0.58541 (0.5699)

Source: Authors’ calculations.

Note: (i) GDP per capita is in natural logarithm, all other variables are in level; (ii) All variables are in natural logarithm; (iii) Optimal lag length selection is based on the Schwarz Information Criterion (SIC); (iv) Probability values in parentheses.

Results of the DOLS estimation show that, the coefficient for aid is positive for the log-linear model, and negative for log-log model. However, both of these coefficients are statistically insignificant. In the case of aid squared, the coefficient is negative for the log-linear model, and positive for the log-log model, but both coefficients are statistically insignificant. From this analysis, it may be implied that, aid is not a significant determinant of economic growth for Bangladesh. In both models, it is found that, the coefficients for labour supply, broad money supply and the policy index are positive, and statistically significant. The adjusted R-squared shows that, the goodness of fit for the log-linear model is higher, compared to the log-log model (Table 7).

Table 7: Effect of foreign aid on GDP per capita growth

Variable	Model	
	Log-Linear ⁽ⁱ⁾ GDP per capita	Log-Log ⁽ⁱⁱ⁾ GDP per capita
Aid	1.036575 (1.000280)	-42221.94 (44902.14)
Aid squared	-0.372411 (0.338919)	21110.94 (22451.14)
Investment	0.003814 (0.011563)	0.044675 (0.203643)
Labour	0.270173** (0.086084)	0.847644** (0.278772)
Broad money supply	0.026765** (0.007597)	1.309213*** (0.230249)
Institutional quality index	0.038833 (0.044616)	0.476411 (0.406648)
Policy index	0.307189* (0.110836)	0.403272* (0.202937)
Constant	3.403410** (0.963096)	-
R-squared	0.982052	0.886795
Adjusted R-squared	0.932697	0.773591

Source: Authors' calculations.

Note: (i) Dependent variable is in natural logarithm, all other variables are in level and level trend specification assumed; (ii) All variables are in natural logarithm and no trend specification assumed; (iii) Aid and aid squared are cointegrating regressors; (iv) Automatic lead and lag specification based on Akaike Information Criterion (AIC), SIC, and Hannan–Quinn Information Criterion; (v) Standard errors in parentheses; (vi) *, ** and *** denote statistical significance at 1 per cent, 5 per cent and 10 per cent levels, respectively.

6. CONTRIBUTION OF ODA ON HEALTH OUTCOME IN BANGLADESH

Education project aid as percentage of total education expenditure has fallen from 24.1 per cent in FY2005-06 to 7.6 per cent in FY2016-17. During the same time period, the health project aid as percentage of total health expenditure also fell, albeit more gradually, from 41.8 per cent to 30.2 per cent (Table 8). This implies that, in both education and health sectors of Bangladesh, the proportion of aid has been falling over the years.

Table 8: Sectoral aid as a share of sectoral expenditure

(in Percentage)

Year	Education project aid as share of total education expenditure	Health project aid as share of total health expenditure
FY2006	24.1	41.8
FY2007	25.1	43.2
FY2008	13.7	31.9
FY2009	24.3	37.3
FY2010	11.1	19.7
FY2011	9.3	22.1
FY2012	11.6	29.0
FY2013	15.7	21.0
FY2014	10.3	20.6
FY2015	9.6	13.2
FY2016	9.3	12.8
FY2017	7.6	30.2

Source: Authors' compilation based on MoF (2019).

In Section 5, it was shown that, foreign aid did not have any statistically significant impact on the growth of the GDP per capita in Bangladesh. This section delves into a deeper analysis, and investigates the effect of foreign aid on social sectors, such as education and health. The aim of such an inquiry is to find out, whether foreign aid may have any influence on education or health outcomes, even if it does not have any impact on the growth rate of the GDP per capita. In this sense, scope of the empirical analysis in this section is narrower compared to that of Section 5.

Due to lack of availability of high-quality time series data, the impact of foreign aid on education outcomes could not be analysed. Therefore, subsequent analysis is limited to the effect of foreign aid on health outcomes. The infant mortality rate (IMR), under-five mortality rate (U5MR) and child death rate (ChDR) were used as dependent variables. Since each of these variables represent the death of children, under various definitions outlined in Table 9, increase in their values indicate a worsening of health outcomes. Project aid in health sector and per capita aid in health sector are used as variables representing foreign aid. Per capita government health expenditure, per capita private health expenditure and per capita out-of-pocket health expenditure are used to represent the healthcare expenditure by the government, private sector and individuals. The variables used, along with their definitions are outlined in Table 9.

Table 9: Variables (for disaggregated analysis)

Variable	Definition
Infant mortality rate (IMR)	IMR is the number of deaths occurring during a given year among the live-born infants who have not reached their first birthday, divided by the number of live births in the given year, and usually expressed per 1,000 live births.
Under-five mortality rate (U5MR)	U5MR is defined as the number of deaths to children under five years of age per 1,000 live births in a given year.
Child death rate (ChDR)	ChDR is defined as the number of deaths among children in age 1–4 per 1,000 mid-year population in the same age group.
Project aid in health sector	Disbursement of project aid in health sector (million USD).
Per capita health aid	Current external expenditures on health per capita expressed in international dollars at PPP.
Per capita government health expenditure	Public expenditure on health from domestic sources per capita expressed in international dollars at PPP.
Per capita private health expenditure	Current private expenditures on health per capita expressed in international dollars at PPP.
Per capita out-of-pocket health expenditure	Health expenditure through out-of-pocket payments per capita in international dollars at PPP.

Source: Authors' compilation based on BBS (2018) and World Bank (n.d.).

The empirical analysis is carried out following the same methodology that was utilised in Section 5, namely all variables were checked for unit roots using augmented Dickey-Fuller and Phillips-Perron tests, followed by model estimation using DOLS.

Results

The results of the DOLS estimation show that, on average, and provided all other factors are held constant, project aid in the health sector is a statistically significant determinant of the three selected health outcomes pertaining to children. On average, per capita health aid is also found to be a statistically significant determinant of two of the selected health outcomes pertaining to children, provided all other factors are held constant. On average, a one-per-cent increase in project aid to the health sector decreases IMR, U5MR and ChDR by 8.1 per cent, 12.8 per cent and 13.3 per cent, respectively, provided all other factors are held constant. The effect of changes in per capita health aid

Table 10: Effect of foreign aid in health sector on health outcomes

Variable	Model		
	Log-Log ⁽ⁱ⁾ IMR	Log-Log ⁽ⁱ⁾ U5MR	Log-Log ⁽ⁱ⁾ ChDR
Project aid in health sector	-0.080906** (0.005299)	-0.127899** (0.010459)	-0.132605** (0.039631)
Per capita health aid	-0.288816** (0.019316)	-0.263639* (0.038121)	-0.112739 (0.085884)
Per capita government health expenditure	-0.134111* (0.012634)	-0.377323** (0.024935)	0.060295 (0.084468)
Per capita private health expenditure	1.521650 (0.374045)	-7.105054* (0.738202)	6.870401 (3.457137)
Per capita out-of-pocket health expenditure	-1.601359 (0.393535)	6.911961 (0.776667)	-9.230460* (3.523743)
Constant	2.250152*** (0.011464)	3.059968*** (0.022625)	1.630999 (0.145183)
Trend			0.129262** (0.027176)
Trend squared			-0.001063** (0.000309)
R-squared	0.999983	0.999957	0.997511
Adjusted R-squared	0.999796	0.999489	0.993032

Source: Authors' calculations.

Note: (i) All variables are in natural logarithm; (ii) Project aid in health sector and per capita health aid are cointegrating regressors; (iii) Automatic lead and lag specification based on AIC, SIC and Hannan–Quinn Information Criterion; (iv) Standard errors in parentheses; (v) *, **and *** denote statistical significance at 1 per cent, 5 per cent and 10 per cent levels, respectively.

are more pronounced. On average, a one-per-cent increase in per capita health aid decreases IMR and U5MR by 28.9 per cent and 26.4 per cent, respectively, provided all other factors are held constant (Table 10). These results show that foreign aid for the health sector does have statistically significant effects on health outcomes. More specifically, since increases in foreign aid are found to improve health outcomes, which implies that given the present circumstances, phasing out of foreign aid for the health sector would adversely impact health outcomes.

7. CONCLUSIONS AND RECOMMENDATIONS

Bangladesh has been able to reduce its dependency on foreign aid through improved macroeconomic performance, driven by increased international trade and higher remittances. In other words, higher integration into the global economy has played crucial role in advancing Bangladesh's economy. However, the role of foreign aid in addressing some of the crucial issues cannot be undermined. More specifically, support towards areas such as health and education have been very useful for Bangladesh. Indeed, such support was crucial for meeting several MDGs by Bangladesh, such as universal primary education, reduction in child mortality, and improvement in maternal mortality. In case of SDG implementation, external support, including aid, will become even more important, because of the vast nature of the SDGs.

Moreover, despite much improvement in the economic front, Bangladesh still needs to address a few critical issues, including creation of employment opportunities for a large number of unemployed youth, reduction of rising inequality, tackling the impact of climate change and ensuring basic needs for all. The main ethos that the SDGs hold is, tackling various dimensions of poverty, addressing inequality and ensuring justice to all in the society. Through committing to deliver the SDGs, the government is also bound to ensure that “no one is left behind.” However, the capacity of the government to mobilise

domestic resources remains low. Therefore, foreign aid will continue to be an important source for delivering the SDGs for developing countries, such as Bangladesh.

Since Bangladesh will be graduating from the LDC category by 2024, it will have to take four broad approaches in the coming days with respect to resource mobilisation for SDG implementation. First, till 2024, Bangladesh should explore more aid from its development partners. Over time, there has been changes in types, composition, sectoral focus and sources of aid. However, Bangladesh should identify its own requirements for aid, and should be involved in aid-supported projects from the designing phase through to the completion phase. Aid should be used in sectors based on citizen's demand. Since the SDG implementation calls for partnership, aid-supported projects should involve local people who can identify their own problems, and also suggest local solutions. Local people should also be involved in assessing the outcome of donor-supported projects, to ensure accountability. Second, Bangladesh should more actively explore other sources of external finance, including blended finance and South–South Cooperation. Third, it needs to strengthen its domestic resource mobilisation through increasing tax–GDP ratio by appropriate regulatory framework and technological upgradation. Fourth, the capacity of human resources, particularly those who are associated with designing and implementing foreign-supported projects, needs to be enhanced. This will improve the absorptive capacity of the country in terms of utilising foreign aid at a higher rate, and help reduce the volume of aid in the pipeline.

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ANNEX

Annex Table 1: Summary of disbursement of 20 major development partners: FY1971-72 to FY2016-17

(Million USD)

Partner	Grant	Loan	Total
World Bank	1132 (6)	17224 (94)	18356
Asian Development Bank (ADB)	211 (2)	12452 (98)	12663
Japan	3440 (35)	6375 (65)	9814
United Nations system	3776 (100)	0 (0)	3776
United States of America (USA)	2796 (79)	764 (21)	3559
United Kingdom (UK)	2604 (97)	89 (3)	2693
Canada	2192 (99)	16 (1)	2208
Germany	1758 (87)	268 (13)	2025
European Union (EU)	1785 (97)	48 (3)	1833
UNICEF	1271 (100)	0 (0)	1271
China	45 (4)	1214 (96)	1259
Netherlands	1117 (94)	71 (6)	1188
Denmark	984 (87)	142 (13)	1125
India	416 (41)	595 (59)	1011
Saudi Arabia	587 (59)	412 (41)	999
Islamic Development Bank (IDB)	22 (2)	938 (98)	960
Sweden	878 (97)	24 (3)	903
Russia	35 (4)	776 (96)	811
Norway	709 (99)	3 (1)	713
International Fund for Agricultural Development (IFAD)	16 (3)	584 (97)	600
<i>Total</i>	<i>25772 (38)</i>	<i>41994 (62)</i>	<i>67766</i>
<i>All donors</i>	<i>27032 (37)</i>	<i>45840 (63)</i>	<i>72872</i>

Source: Authors' calculations based on the data from MoF (2017b).

Note: Numbers in parentheses represent share in row total (in per cent). For example, 6 per cent in the grant column for the World Bank signifies the share of grants in total assistance provided by the World Bank.

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- Paper 111 Bali Ministerial of the WTO and the Way Forward: Safeguarding LDC Interests

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