

The Scoping Study on Paperless Trade Reform in Bangladesh

Prepared for: **Promoting Knowledge for Accountable Systems (PROKAS),** British Council, in association with Palladium, and WISE Development

Prepared By: Bangladesh Foreign Trade Institute (BFTI)

Dhaka, Bangladesh.

August, 2017.

FOREWORD

Bangladesh Foreign Trade Institute, Dhaka, Bangladesh, has already to its credit the successful completion of quite a few original research works in the arena of trade. But none, to my view, has so far been as original as the present scoping study on paperless trade. Bangladesh's signing of the Framework Agreement on cross-border paperless trade of the UN-ESCAP will, hopefully, have gotten the Cabinet approval by the time this study is presented to the authorities of PROKAS—Promoting Knowledge for Accountable Systems----programme leading to ratification of the same at a suitably later date. I venture to call it truly original as this scoping study, along with the other follow-up research works coming in its trains, will be the first of its kind in the country and, whenever it occurs, elsewhere in the Asia-Pacific region, as it is a brand new area of trade, although various other international trade agreements, including the Trade Facilitation Agreement of the WTO, are sometimes tangential to, or closely parallel with, this agreement.

There is a growing recognition around the world in recent years for the need to ensure greater efficiency and security of international supply chains, the need to reduce clearance time by simplifying trade clearance processes, and the need to reduce trade transaction costs. The current emphasis is therefore on identifying ways to move away from a paper-based document system towards paperless information exchange, as paperless trade is viewed as an important mechanism to ensure transparency and reduce time and trade-related costs.

The Government of Bangladesh is committed to implement paperless trade, and has ratified the WTO Trade Facilitation Agreement. It has already undertaken a number of reform programmes and initiatives, in many cases with technical assistance from development partners, to facilitate paperless trade. However, there are areas that are still untapped, and require immediate attention and focus from the Government.

The DFID has come forward to support Bangladesh's efforts to implement paperless trade through the PROKAS programme being implemented by British Council, in association with Palladium, and WISE Development. This initiative to conduct a Scoping Study for paperless trade in Bangladesh is an extremely useful and timely one. The Scoping Study made an initial assessment of the capacity of different trade related agencies, actions already undertaken by government agencies, regulatory as well as policy gaps in implementing paperless trade, potential interest groups i.e. possible winners and losers of the reform process, and possible ways of inclusion of marginalised groups including, SMEs, women and young entrepreneurs, into formal trade through implementation of paperless trade. In addition, the Study proposed a number of recommendations related to in-depth studies/analyses, and awareness building initiatives/motivational programmes for facilitating paperless trade, and added an Action Plan for the PROKASH programme.

I congratulate the PROKAS programme for undertaking this initiative and hope that this report will provide the policymakers of the Government and stakeholders with an effective guideline for conducting in-depth studies for proper assessment of constraints, needed initiatives, interest group dynamics and other policy support issues to bring the relevant stakeholders on board for paperless trade. It will also assist donor agencies/development partners' efforts in supporting the Government and other agencies to conduct in-depth studies with a view to having a proper understanding of the realities, opportunities, strengths and gaps in implementing paperless trade, and extending support measures for effective implementation of the same.

The BFTI has received strong support, encouragement and patronage from the Ministry of Commerce, including from hon'ble Commerce Minister, Mr. Tofail Ahmed, M.P., and the Senior Secretary, Mr. Shubhashish Bose, throughout the duration of the study. Debts to a number of individuals, whose support and cooperation have contributed in improving the quality of this study, should be acknowledged. The BFTI is heavily indebted to Dr. Md. Khairuzzaman Mozumder, Chief of Party, and Dr. Mohammad Abu Yusuf, Customs Specialist, of USAID Bangladesh Trade Facilitation Activity, for their continuous support, assistance and guidance. Thanks are also due to Mr. Md. Nojibur Rahman, Senior Secretary, Internal Resources Division, and Chairman, National Board of Revenue, and the many other eminent persons of the country, who took pains to attend the Focus Group Discussion and the Validation workshop for the study and enriched the scoping study in many ways. I would especially like to put on record my deep appreciation of the contributions made by the research team of the BFTI, but for whose untiring efforts the report would not have been what it is now.

Finally, on behalf of the BFTI, I express my sincere thanks and gratitude to British council/PROKAS Team Leader Ms. Catherine M Cecil, and Mr. Showkat Ali Waresi, Deputy Team Leader, for keeping their confidence in the BFTI in conducting the study.

I wish PROKAS a continued success in the days ahead.

Dhaka, August, 2017.

applied,

(Ali Ahmed) Chief Executive Officer

Contents

ACRONYMSi
Introduction1
Methodology
Chapter One: Opportunities & Challenges for Paper-less Trade Reforms
1.1 Facilitating Paperless Trade: Potential Opportunities for Reform
1.2 Facilitating Paperless Trade: Constraints to Reform7
Chapter Two: Capacity Assessment & Gap Analysis in Implementing Reforms
2.1 Government Capacity and Its Efforts to Implement Paperless Trade11
2.2 Gap Analysis on Implementation of Paperless Trade
Chapter Three: Potential Groups with Positive/Negative Interests in Reforms
3.1 Stakeholders' Perception Analysis
3.2 Relative Clout of Different Interest Groups/Stakeholders
3.3 Probable Risks in Implementing Paperless Trade25
Chapter Four: Inclusion of Marginalised Groups
4.1 Small and Medium-Sized Enterprises
4.2 Women Entrepreneurs
4.3 Youth Entrepreneurs
Chapter Five: Conclusions and recommendations
References:
Appendix 1: Action Plan under the PROKAS Programme

ACRONYMS

ADB	Asian Development Bank		
AEO	Authorised Economic Operator		
ASYCUDA	Automated System for Customs Data		
AWB	Air Way Bill		
BAEC	Bangladesh Atomic Energy Commission		
BBS	Bangladesh Bureau of Statistics		
BSTI	Bangladesh Standards and Testing Institute		
C&F	Clearing and Forwarding		
CBM	Coordinated Border Management		
CCI&E	Chief Controller of Imports and Exports		
СМ	Certification Mark		
CoO	Country of Origin		
DAE	Department of Agricultural Extension		
EPB	Export Promotion Bureau		
EPZ	Export Processing Zone		
EU	European Union		
FGD	Focus Group Discussion		
GESI	Gender Equality and Social Inclusion		
IATA	International Air Transport Association		
ICD	Inland Container Depot		
ICT	Information and Communication Technology		
INGO	International Non-Government Organisation		
IPEC	India Pacific Economic Corridor		
LC	Letter of Credit		
LDC	Least Developed Country		
MoC	Ministry of Commerce		
NBR	National Board of Revenue		
NGO	Non-Government Organisation		
NTB	Non-Tariff Barrier		
OGA	Other Government Agency		
OLM	Online licensing module		
PAP	Pre-Arrival Processing		
RKC	Revised KYOTO Convention		

RM	Risk Management	
RoO	Rules of Origin	
SASEC	South Asia Sub-regional Economic Cooperation	
SME	Small and medium enterprise	
SRO	Statutory Regulatory Order	
SW	Single Window	
TFA	Trade Facilitation Agreement	
TRS	Time Release Study	
WBG	World Bank Group	
WCO	World Customs Organisation	
WTO	World Trade Organisation	
UNCTAD	United Nations Conference on Trade and Development	
UNECE	United Nations Economic Commission for Europe	
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific	
USAID	United States Agency for International Development	

Introduction

With the adoption in December 2013, and coming into force in February 2017, of the Trade Facilitation Agreement (TFA) under the World Trade Organisation (WTO), there has been a growing recognition around the world for the need to ensure greater efficiency and security of international supply chains, the need to reduce clearance time by simplifying trade clearance processes, and the need to reduce trade transaction costs. While trade facilitation is viewed as the key to ensuring all these, the issue of promoting paperless trade and adopting appropriate and adequate measures to that end has also come to the fore.

There is an increased focus around the world among both the governments and the private sector to identify 'ways to move away from a paper based document system towards paperless information exchange', since paperless trade offers the scope to 'significantly reduce the risk of global trade through less and better data', and reduces trade-transaction costs by increasing efficiency (UNCTAD, 2005). To facilitate overall trade performance, paperless trade is now considered an important mechanism to ensure transparency and reduce time and trade-related costs. The term 'paperless trade' refers to the conduct of "trade transactions on the basis of an electronic exchange of trade-related data and documents, in contrast to the conventional way of exchanging trade information using paper documents" (Ha & Lim, 2014).

Paperless trade generally refers to the conduct of international trade transactions using electronic, rather than paper-based, data and documents. But it would not eliminate the paper-based documentation altogether. Our reference on paperless trade in this Study will therefore mean to include both 'paper-less' trade transactions where a portion of the trade-related data and documents are exchanged electronically, and 'paperless' trade transactions where all of the trade-related data and documents are exchanged electronically (Ibid). Again, in addition to its general focus on at-the-border, or in-country, paperless trade, our discussion will also include cross-border paperless trade defined by UNESCAP (2016a) as "trade in goods, including their import, export, transit and related services, taking place on the basis of electronic communications, including exchange of trade-related data and documents in electronic form".

While it is well understood and acknowledged that the worldwide transition to paperless trade is a long, gradual and arduous process, it is also recognized that concerted efforts and active engagement from both the government agencies and the private sector nationally, bilaterally, regionally and internationally are required. Hence, the preferred approach is to focus on country cases, concentrating on single countries and aiming to facilitate its paperless trade at both incountry and cross-border levels.

From that perspective, this Scoping Study undertakes the Bangladesh case study to identify scopes for introducing paperless trade in the country, and analyse the power dynamics involved in the reform process identifying the potential interest groups for and against. While outlining concrete recommendations and an action plan for bringing out effective and meaningful reforms, it will also examine the possibility of inclusion of excluded and marginalised (e.g. women) sectors in the

reformed trade, with the underlying assumption being that providing instruments of power (like laws, standards, rules, policy support) and commitment of resources to facilitate participation of excluded and marginalised sector in paperless trade would shape their inclusion and influence. Accordingly, principal objectives of the Study are:

- To identify the potential opportunities for and constraints to reform of the current paperbased trade system to a paperless trade system in Bangladesh;
- To analyse the capacity of government and gaps in existing laws and regulations, policies and practices on trade in line with the WTO TFA for implementation of paper-less trade;
- To identify potential interest groups (private sector, NGOs and government) with both positive interests and incentives as well as negative interests in reforming the system including probable risks in implementation of paperless trading system in Bangladesh; and
- To identify the possible ways of inclusion of marginalised groups of people including women, young entrepreneurs and Small and Medium Enterprises (SMEs) into formal trade through implementation of cross-border paper less trade in Bangladesh.

Methodology

The Scoping Study comprises the desk review of secondary resources and literature, and the qualitative research methodology. Under qualitative data collection techniques, Focus Group Discussions (FGD) was also held in order to produce high quality data¹. Participatory consultation was conducted with relevant stakeholders that include:

- Regulatory bodies, policy makers, such as Ministry of Commerce (MoC), Ministry of Industries and National Board of Revenue (NBR);
- The private sector trade bodies including: representatives of women's chambers of commerce, SME groups, young entrepreneurs; and
- Relevant national and international Non-Government Organisations (NGOs and INGOs).

To avoid being exclusive, the Study designed a participatory research approach; for example, women entrepreneurs engaged in trade activities were included through purposive sampling for in-depth interviews. This will help unpack Gender Equality and Social Inclusion (GESI) dynamics, and enable effective participation of women, SMEs and other marginalised and excluded groups. Experience from, and perception of, the participants will help understand actors' relative roles and relations, and their relative power and access to involve in trade processes. To obtain relevant information, in-depth interviews (only a few were possible given the limited time for the Study) were conducted. Data were analysed using interpretive enquiry (interpretivism). In addition, desk review and stakeholder consultation helped in understanding the key concerns, such as - how the

¹ Since the focus group moderator can respond to questions, probe for clarification and solicit more detailed responses, FGDs offer a great opportunity to have verification of data.

different roles and status of excluded and marginalised groups vis-à-vis socially included ones affect their inclusion in trade processes (including paperless trade).

Limitations of the study relate to the fact that it is merely a scoping study and that the initial findings are based on secondary data and a very limited number of interviews due to time constraints². Hence, it needs to be acknowledged that the study suffers from adequate robustness and reliability. Future comprehensive studies in each areas are needed to claim robustness and generalisability.

² The BFTI was allowed a time of less than a month to conduct the Scoping Study.

Chapter One: Opportunities & Challenges for Paper-less Trade Reforms

This Chapter makes an attempt to identify the potential opportunities for, and the constraints to, reform of the current paper-based trade system to a paperless trade system in Bangladesh. While Section 1.1 examines the potential opportunities for reform in facilitating paperless trade, Section 1.2 analyses the constraints and challenges that such reform programmes may face in the event Bangladesh decides to transform its paper-based system into a paperless one.

1.1 Facilitating Paperless Trade: Potential Opportunities for Reform

As the focus of the international trade community increasingly shifted towards the numerous nontariff barriers (NTBs) due to the gradual dismantling of tariff walls around the world, issues like facilitating trade and promoting paperless trade have gained momentum. Initiatives for paperless trade aim at removing or reducing those NTBs that emerge from the existence of inefficiencies in trade processing systems, institutions and infrastructure. Such inefficiencies, often referred to as procedural NTBs, can be broadly categorized into the following types –

- (i) *Slow and archaic C*
- (ii) *Customs clearance systems*: These include the lack of upgradation of Customs clearance systems as per international standards, inherent delays in completing assessment, and delays in processing clearance and release, etc.

(ii) *Cumbersome trade documentation requirements*: These include the requirement of unnecessary documents, the need for multiple copies of the same document, the absence of a single point of entry or the national single window system, the lack of adequate intra-border (or, incountry) and cross-border agency cooperation, etc.

To deal effectively with such inefficiencies, the issue of replacing paper-based trade processes with the paperless one has become prominent in recent years, and the WTO TFA (WTO, 2013) stands as a testament to such international attention. Quite a handful of TFA provisions relate to paperless trade. These broadly include- release and clearance of goods (Article 7), border agency cooperation (Article 8), and formalities connected with importation and exportation and transit (Article 10). Similar efforts in the region of Asia and the Pacific under the behest of UNESCAP resulted in the conclusion of the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific in 2016 (UNESCAP, 2016a), which is complimentary to the WTO TFA as its implementation will support the above TFA provisions; the difference being that the UNESCAP Framework Agreement deals only with cross-border paperless trade.

Trade facilitation measures under Article 7 whose implementation will boost paperless trade include - pre-arrival processing, electronic payment, risk management, post-clearance audit, authorised operators, and expedited shipments. Similar measures under Article 10 include – formalities and documentation requirements, acceptance of copies, use of international standards, single window, and common border procedures and uniform documentation requirements. Provisions under Article 8 emphasise border agency cooperation involving both in-country and

cross-border cooperation. These, together with some of the measures under Articles 7 and 10, form the basis for coordinated border management, a key element in the facilitation of paperless trade.

The term 'coordinated border management' (CBM) refers to a coordinated approach by the border agencies, whether domestic or international, in order to seek "greater efficiencies over managing trade and travel flows, while maintaining a balance with compliance requirements" (Aniszewski, 2010). The domestic border management system involves domestic coordination within and between agencies of one country. Coordination within agencies implies the intra-services cooperation that refers to internal cooperation among one agency (e.g. Customs), and coordination between agencies implies inter-agency cooperation that may take place at local, regional and national levels between ministries or agencies with different tasks related to border management (Ibid). Inter-agency cooperation especially at the national level may include Single Window or integrated procedures and risk management systems.

The second dimension, cross-border management system, involves collaboration with neighboring countries and trading partners to eliminate or at least reduce duplication of processes/procedures at border crossings (Jain, 2012). Such cross-border agency cooperation occurs at three different levels; for example local cooperation between officials on both sides of the border, bilateral cooperation between neighboring states, and multinational co-operation (Aniszewski, 2010). Local level cooperation requires the existence of 'One Stop Border Post' or 'Juxtaposed Customs' operated by two neighboring countries. Bilateral cooperation includes meetings between neighboring countries at the regional and central levels, setting up of joint patrols, creation of contact points etc. Multilateral cooperation involves country-to-country exchange of information, holding of regional or multilateral training seminars or workshops etc.

After identifying the potential areas for reforming the current paper-based trade system to a paperless one, let us focus our attention to the opportunities such reforms may create or the benefits they may accrue. It is often suggested that by switching from paper-based to electronic solutions, international trade can bring cost savings, and increase security and transparency. In terms of cost savings in air cargo, according to data provided by International Air Transport Association (IATA), it will save US\$ 30 paper processing cost per airway bill, and as there are about 35 million airway bills per annum, total savings will be more than US\$ 1 billion per annum (cf UNECE, 2006).

Benefits and gains such paperless trade will bring for governments include faster clearance at ports, improved service delivery, enhanced supply chain security, and higher revenue collection from international trade with less administrative costs. Benefits also include faster information exchange and efficient data entry and processing. Security and compliance of trade operations are increased through the provision of electronic data, which are 'more structured, more reliable and easier to use in automated risk analysis' (UNECE, 2006). Automation of trade and Customs processes will mean less administrative costs. Further, increase in the supply chain security owing to the automated use of high risks (addressed through physical examination), medium risks (addressed

through post-clearance audit) and low risks (addressed through authorised economic operators) will mean that less revenue is lost through commercial fraud and non-compliance.

Benefits and gains for the private sector include increased efficiency in integrated supply chains, provision of improved services from border trade agencies, and reduction in trade transaction costs. In an attempt to highlight such benefits of paperless trade for the private sector, UNECE (2006) maintains that it "eliminates the operational costs related to processing paper, increases the transparency of the supply chain and the exchange of information between the trading partners, improves trade and finance processes and helps build new collaborative modes among companies". Further, automation of trade processes and use of common standards and procedures eliminate the need for repeated data entry, reduce errors and delays, and ensure acceptance of copies of documents by trade agencies. In addition, by guaranteeing faster clearance and secure supply chain, such paperless trade encourages the private sector companies to develop new, value-added services, such as automated tracking and tracing systems, monitoring of document processing and security. These development will also augur well for the excluded and marginalised sectors, such as the SMEs and women entrepreneurs, who will be able to participate in international trade transactions more easily, and conduct trade formalities on their own.

Some countries, such as Japan, Republic of Korea and Singapore, were the pioneer in the Asia-Pacific region in recognising the potential benefits from conducting trade transactions on the basis of electronic rather than paper-based data and documentation, as they began implementing paperless trade systems from the late 1990s and early 2000s (UNESCAP, 2016b). These were followed by some other regional countries. It is expected that the conclusion of the WTO TFA and the UNESCAP Framework Agreement will undoubtedly invigorate the process of transformation into paperless trade regimes throughout the region, and will bring significant gains for the regional countries. Data from Singapore illustrates that implementation of "electronic Single Window reduced the number of trade documents from between three and 35 to just one, lowered the submission cost per document from US\$ 6.25 to US\$ 1.80, and decreased processing time per permit to 10 minutes from between four hours and seven days" (UNNExT, 2010).

Again, data from Japan reveals that the introduction of Single Window led to a reduction in documentary requirements by 50%, from 16 to 8, and that its benefit to the Japanese economy was about US\$ 532.9 million annually for a cost of US\$ 93.6 million (UNNExT, 2011). In the case of Republic of Korea, total savings for the business community from the use of the uTradeHub³ is estimated at around US\$ 1.82 billion. This gains in Korea includes 'savings from reduced transmission costs by using e-documents, improved productivity by automating administrative work, and improved management, storage and retrieval of information and documents through use of information technology' (Ha & Lim, 2014).

In addition to bringing positive gains and benefits for national governments and domestic private sector through the implementation of in-country paperless trade regimes, expanding it to cross-

³ uTradeHub provides an automated information transaction system in the Republic of Korea.

border paperless trade also has significant potential to reduce trade transaction costs, and boost trade. For example, an UNESCAP study (2014: p.30) found that partial implementation of crossborder paperless trade measures in the Asia-Pacific region would be associated with an export increase of US\$ 36 billion annually. Again, it found that in the case of full implementation of cross-border paperless trade in the whole Asia-Pacific region the export potential will increase to US\$ 257 billion annually⁴. In that case, the time required to export would fall by 24 per cent to 44 per cent, and direct costs by 17 per cent to 31 per cent, depending on the reform scenario considered. The study also estimates (Ibid) that 'total direct cost savings across all trade would be approximately US\$ 1bn annually for partial reform, and US\$ 7bn annually for full implementation. Data from outside the Asia-Pacific region reveal a similar trend. For example, implementation of a paperless trade system in Zambia reduced cargo processing time from five days to two hours while the use of automated systems in Morocco reduced average clearance time from 132 hours to less than an hour (Yasui & Engman, 2013).

It needs to be stressed at this point that same opportunities for transforming the paper-based trade systems into paperless ones exist in Bangladesh. Or that, transforming its trade processes into a paperless system will undoubtedly bring important benefits and significant gains for Bangladesh as in other countries. The Time Release Study (TRS) conducted at the Benapole land port in 2014 revealed that the average time taken at the land port for release of import cargo was 5 days, 18 hours and 24 minutes, and for export cargo was 4 days, 5 hours and 26 minutes (World Bank, 2014a). Similarly, the TRS conducted at the Chittagong sea port revealed that the time taken at the sea port for release of import cargo was 11 days, 9 hours and 45 minutes, and for export cargo was 4 days, 22 hours and 38 minutes (World Bank, 2014b). In the absence of any follow up TRS, we do not know for sure whether there has been any improvement since 2014; however, the above statistics clearly reflect the need for undertaking paperless trade reform programmes to improve the situation.

1.2 Facilitating Paperless Trade: Constraints to Reform

Implementation of paperless trade and undertaking reform programmes to that end have not been as easy as it may sound, and countries, including Bangladesh, face a number of challenges in carrying out paperless trade reforms. An attempt is made here to highlight the main challenges.

<u>1.2.1 Costs of transition to paperless trade</u>:

Costs of transition for the governments and its border agencies, including Customs, is a major cause for concern for developing countries. In addition to financing the initial reform programmes, there are also long term costs in ensuring effective and efficient maintenance and running of paperless trade systems, and that the issue of how such costs are to be shared among the stakeholders in the trade supply chain needs to be taken into account.

Major costs for implementation of such reforms should not only be borne by the government but also by traders or beneficiaries, for they constitute the supply side for electronic documents used

⁴ To reach at this conclusion, UNESCAP (2014) used 2013 data.

in international trade (UNECE, 2006). Companies will only adopt paperless system 'if they see a clear net benefit'. It is especially problematic for small companies, since for them paper is cheap and efficient, and with the low volume of their operations, they may have 'no net advantages to moving away from paper'. Even big companies need to ensure that benefits outweigh initial investment costs, and fees for participating in paperless trade. Therefore, even though such costs often tend to be higher, the main challenge for the countries, including Bangladesh, is to ensure that these costs are not prohibitive. In addition to keeping charges and fees within the acceptable limit of traders or beneficiaries, efforts should also be made by implementing agencies to provide special incentives to small companies and SMEs including women entrepreneurs so that they feel encouraged to use e-documents. For example, as suggested in UNECE (2006), governments could "support small business by rewarding those who submit documents in electronic format, since it also helps to increase the efficiency of government processes".

1.2.2 Problem of interoperability:

In areas of data format, messaging, communication protocols and security measures, different agencies adopt different ICT systems depending on their business needs and requirements. As the inherent focus of any paperless trade initiative is on expanding the use of ICTs, a major challenge therefore in facilitating paperless trade, both in-country and cross-border, is to address the issue of 'interoperability'⁵ of different ICT systems used by different agencies. Hence, when it comes to exchange of data and information among different agencies within a country or between agencies across borders, compatibility of such systems threatens to stall progress towards paperless trade.

The best way to address this problem is to encourage adoption of common international standards as much as possible, since this would ensure interoperability of ICT operations among different agencies in-country and cross-border. In the event of high costs in acquiring common international standards, efforts should aim at adopting those common national standards that ensure compatibility of systems within the country. In that case, it would be necessary to also ensure that national standards adopted are compatible with systems used by agencies across borders.

1.2.3 Choosing the right technology and addressing the security issue:

There are also technology and market risks associated with such reforms. As stressed in UNECE (2006), paperless trade initiatives involve "the integration of cross-sector business requirements and the integration of different eBusiness technologies such as UN/EDIFACT, UNeDocs, Business modeling, UN/CEFACT Core Components, ebXML, RosettaNet and emerging technologies". In the market environment offering a whole range of plethora of technologies some of which are mature and stable while others are constantly evolving, the issue of choosing the right technology becomes a critical factor. Such choice will have to depend on the specific needs of the country.

In addition, the increasing use of ICT contributes to increasing security risks, which is compounded by growing incidences of cyber-attacks around the world. While implementing

⁵ Interoperability implies "the ability of two or more systems or components to exchange information and to use the information that has been exchanged" (Ha & Lim, 2014).

paperless trade reforms and introducing new information technologies in trade processing, utmost care must therefore be given to ensure security of the entire process. Putting effective certification procedures and digital signature systems in place will be of great assistance in tackling such challenge.

1.2.4 Lack of reforms in other government agencies:

The Scoping Study found that the Customs Department under the NBR has undergone significant changes since the early 1990s through many donor-funded reform programmes funded by the World Customs Organisation (WCO), the World Bank Group (WBG), the Asian Development Bank (ADB) and the United States Agency for International Development (USAID). As a result, Customs is more advanced in terms of implementation of such reforms. But a large number of other government agencies (OGAs) are also involved in trade processes, which include – the MoC, Office of Chief Controller of Imports and Exports (CCI&E), Ministry of Agriculture, Plant Quarantine Department, Ministry of Shipping, Ministry of Industries, Bangladesh Standards and Testing Institute (BSTI), Bangladesh Land Port Authority, Chittagong and Mongla Port Authorities, Bangladesh Civil Aviation Authority, Border Guard Bangladesh, Bangladesh Atomic Energy Commission (BAEC), Directorate of Drug Administration, and Bangladesh Bank. The OGAs are not as advanced as Customs in terms of modernisation and trade facilitation reforms. Our interviews with representatives from the OGAs revealed that these are ill-equipped in terms of implementation of TFA measures. In some cases, they are not even aware what reform programmes they would have to undertake. Again, unlike the Customs Department, the OGAs are neglected in terms of receiving proper attention from development partners. This will be a major challenge in implementing paperless trade.

1.2.5 Problem of coordination among different agencies:

In Bangladesh, delays in international trade processes are often caused and aggravated by a lack of coordination and cooperation among border agencies. As explained above, in addition to Customs, a large number of border agencies are involved in trade processes. Especially in incountry cases, these agencies have different mandates with regard to goods and people crossing the borders (Jain, 2012). Such mandates vary from revenue assurance, migration, phytosanitary, radiological, transport, ecological and food safety controls (Polner, 2011). Hence, they tend to work independently, without a clear understanding and knowledge of what other agencies are doing, often leading to multiple inspections of the same goods and considerable harassment for traders. Continuation of such problems will make it difficult for Bangladesh to make any meaningful progress towards implementation of single window and other paperless trade reforms.

Similar coordination problems exist in cross-border trade; for example, in the case of trade between Bangladesh and India, this problem is frequently observed among cross-country border agencies (e.g. the two Customs departments). In fact, cross-border paperless trade is still at a nascent stage of implementation in most countries in the Asia-Pacific region (UNESCAP, 2013).

1.2.6 Lack of emphasis on cross-border trade barriers:

Some countries, such as Republic of Korea and Singapore, were the pioneers in the Asia-Pacific region in recognising the potential benefits arising from conducting trade transactions on the basis of electronic rather than paper-based data and documentation, as they began implementing paperless trade systems from the late 1990s and early 2000s (UNESCAP, 2016b). While these were followed by some other regional countries, the focus is mainly on facilitating information exchange between stakeholders domestically. The absence of cross-border paperless trade implies that effective transformation into full paperless trade is hampered by both 'technical and legal barriers beyond the border, requiring traders to maintain conventional paper-based trade practices, thus reducing the overall benefits and return on investment from paperless trade systems" (UNESCAP, 2016b). Hence, there should be a mechanism to spearhead the use of electronic means for cross-border trade information flow; the UNESCAP Framework Agreement is thus a timely initiative.

Chapter Two: Capacity Assessment & Gap Analysis in Implementing Reforms

Chapter 2 attempts a regulatory assessment and gap analysis in the implementation of paperless trade in Bangladesh. While Section 2.1 assesses the government capacity and its efforts to implement paperless trade, Section 2.2 examines the existing gaps in relevant trade related laws, regulations, processes and procedures.

2.1 Government Capacity and Its Efforts to Implement Paperless Trade

The previous Chapter identified potential areas of paperless trade reforms, such as pre-arrival processing, electronic payment, risk management, post-clearance audit, authorised operators, expedited shipments, formalities and documentation requirements, acceptance of copies, use of international standards, single window, common border procedures and uniform documentation requirements, border agency cooperation, and coordinated border management. Under these reform areas, efforts to implement paperless trade generally narrow down to a focus on 16 (sixteen) main areas of paperless trade as identified by UNESCAP (2014). These include -

- (1) Electronic/automated Customs system;
- (2) Internet connection available to Customs and OGAs at border crossings;
- (3) Electronic Single Window system;
- (4) Electronic submission of Customs declarations;
- (5) Electronic application and issuance of trade licenses;
- (6) Electronic submission of sea cargo manifests;
- (7) Electronic submission of air cargo manifests;
- (8) Electronic application and issuance of preferential Certificate of Origin;
- (9) Electronic payment of Customs duties and fees;
- (10) Electronic application for Customs refunds;
- (11) Laws and regulations for electronic transactions;
- (12) Recognised certification authority;
- (13) Engagement of cross-border electronic data exchange;
- (14) Electronic exchange of Certificate of Origin;
- (15) Electronic exchange of Sanitary & Phyto-Sanitary certificates; and
- (16) Banks & insurers retrieving letters of credit (LCs) electronically (e.g. no paper-based documents).

Bangladesh has undertaken many trade liberalisation reforms since the mid-1990s where facilitation of trade remained a key concern. Closely following the developments made in the WCO and WTO respectively, the NBR adopted many trade facilitation measures, as a result of which customs clearance processes underwent significant transformation. Key achievements that also contributed towards paperless trade are highlighted below:

- (a) Introduction of ASYCUDA World: Automation of customs processes began with the introduction of Version 2.0 of ASYCUDA (Automated System for Customs Data) in 1994 at Chittagong Custom House. It later expanded to other major customs stations. Over the years, the Customs Administration upgraded the software, and currently uses the latest version, ASYCUDA World. Since July 2013, ASYCUDA World has been rolling out with all major customs stations, covering 99% of the volume of trade (both import and export) of the country. Introduction of ASYCUDA World has enabled the trade community to benefit from the on-line submission of declarations and documents.
- (b) Implementation of Revised KYOTO Convention: Bangladesh has made accession to the WCO Revised KYOTO Convention (RKC) in 2012. Following that, the NBR undertook initiatives to implement all the standards of its General Annex and make Customs law fully compliant with the RKC. After conducting regulatory impact assessment with assistance from development partners, Customs has prepared necessary amendments to its law. These will be implemented under the proposed new Customs Act that currently awaits enactment.
- (c) Implementation of SAFE Framework of Standards: Bangladesh Customs needs to accommodate itself with the current trend and reality in global production sharing and integrated supply chains. From that perspective, the NBR decided to implement SAFE Framework of Standards, and the letter of intent was sent to the WCO in 2010. Customs also examined how it could introduce various aspects of SAFE, such as the authorised economic operator, risk management and risk-based post clearance audit. Necessary legal reforms have also been proposed under the proposed new Customs Act.
- (d) **Implementation of the WTO TFA**: Bangladesh Customs has decided to implement various provisions of the TFA, and as a preliminary step, Customs has already undertaken an initiative to bring necessary legal reforms, which have been proposed under the proposed new Customs Act. Further, measures have been taken, with technical assistance from the USAID, the ADB and the WBG, to establish national trade and customs portals, national enquiry point, advance ruling programme and national single window, and to improve risk management and post clearance audit systems within the next few years.
- (e) **Installing scanners**: For quick and hassle-free examination of both in- and out-bound cargo, container scanners were installed at Chittagong Custom House in 2008. The NBR has also taken steps to install relocatable/mobile and freight scanners, as appropriate, at major customs stations, such as Dhaka, Chittagong, Benapole, Pangaon and ICD Kamalapur.

Despite sincere efforts on the part of the Government and its trade related agencies, capacity constraints hampered the effective progress in achieving success from these initiatives. Such constraints emanate from both the lack of technical capacity and the inability to bear the financial burden of huge costs involved. For example, government agencies suffer from the lack of technical capacity. As the areas of reforms related to paperless trade involve new international standards, governments in many cases have the lesser technical capacity to implement such modern systems.

Again, implementing such reforms require 'certain experiences and knowledge on relevant technologies and skills, such as business process analysis and reengineering, harmonisation of data, application of ICTs, and automation techniques' (Ha & Lim, 2014). Therefore, they depend on the support and technical assistance from development partners. Similar challenge exists in Bangladesh, and it has been difficult for the country to carry out meaningful reforms in such areas without technical assistance from development partners.

Secondly, many reform areas, such as establishing a single window, introducing automated assessment and clearance processes, introducing authorised economic operators, procuring container scanners etc. involve high implementation costs. Financial assistance, in the form of soft loans or grants, from development partners, was considered key in overcoming this particular challenge, and contributed in financing the procurement and establishment of necessary hardware and infrastructure in the country.

The Scoping Study found that being a leading Least Developed Country (LDC) Bangladesh has fared well in this regard. It has been able to attract technical assistance and support from the WBG, the USAID, and the ADB to address the concerns of technical capacity. Similarly, it has received soft loans and grants from development partners, such as the WBG and the ADB, in areas of reforms that include a hardware and infrastructure component. As will be evident from our discussion in Section 2.2, at the moment, the USAID, the ADB, and the WBG are assisting the government in many areas of such trade facilitation and paperless trade reforms.

2.2 Gap Analysis on Implementation of Paperless Trade

This Section makes an area-wide gap analysis on the areas of reforms that will transform the current paper-based trade system into a paperless one. However, the analysis will be brief and short since it is a Scoping Study, and thus requires to keep its size and length at minimum.

We found that in the area of pre-arrival processing (PAP), customs legislation complies with the PAP provisions, but it is not implemented in practice, as there is no established standard procedure to deal with that. The NBR is currently working to implement the PAP system in collaboration with the USAID.

In electronic payment, Customs legislation and ASYCUDA World provide a basis for payment of customs duties, taxes, fees, and charges by electronic means. However, e-payment system is not yet fully operational. Bangladesh Bank and the NBR recently conducted a limited scale pilot programme on electronic payment system at ICD Kamalapur Custom House in collaboration with the UNCTAD. Results of this pilot need to be analysed by all concerned so that the system can be expanded throughout Bangladesh.

In risk management (RM), there is no common procedure, and therefore, different Customs stations employ their own methods in choosing the selectivity criteria for high risk consignments. Customs intends to develop a systematic national approach in collaboration with the USAID and the WBG. Accordingly, a Central Risk Management Technical Unit has been formed, and a Standing Order on the application of automated selectivity within the RM environment is being

processed. This will ensure the adoption of RM across its import and export clearance regimes. But, in the case of other agencies, the use of RM is not evident. Therefore, agencies such as the Plant Quarantine Department, the BSTI and the BAEC need to work in this area.

Post clearance audit system exists in Bangladesh and a designated Post Clearance Audit Department is also in place. There are adequate legal provisions. But in practice, audits are mostly conducted for revenue recovery purposes, and not for expediting the release of goods with medium risks. Risk assessment practices are not used for selection of audit targets, and audit results are not routinely used in applying RM practices to subsequent consignments. With technical assistance from the USAID and the ADB, the NBR has developed draft standard operating procedures and audit manuals, which need to be enforced. On the other hand, the authorised economic operator (AEO) system is meant for consignments with low risks. Although Customs law incorporated legal provisions on AEO in the budget of 2017, the AEO programme is yet to be implemented. The NBR has announced recently that it will pilot the AEO system by December this year in collaboration with the USAID and the ADB.

For expedited shipments, the NBR formulated legal provisions through an Statutory Regulatory Order (SRO) in 2016 that laid down detailed procedures. But Bangladesh is yet to implement the *de minimis* provision. Although the existing Customs law specifies a *de minimis* shipment value (less than or equal Taka 1,000 in value or Taka 1,000 in duty) for which Customs duties and taxes will not be collected, this is yet to be applied to courier consignments. The USAID is assisting the NBR in this reform programme.

In coordinated border management and border agency cooperation, there are both in-country and cross-border dimensions. In terms of in-country border-agency cooperation in Bangladesh, interagency coordination occurs through a range of informal arrangements. For example, common interface is developed at Chittagong port to harmonise the processes between Customs and port authorities. Similar efforts need to be replicated in other ports. Customs offices regularly hold stakeholder meetings to ensure better coordination among border agencies and relevant private sectors. But there are no formal arrangements between in-country border authorities for such coordination.

In terms of cross-border agency cooperation, there is little progress. For example, working days and hours are not aligned with neighbouring countries. Similar situation exists in the cases of procedures and formalities. Again, common facilities are not developed and shared with neighbours, and there are no joint controls performed in cooperation with them. But there are also positive developments, especially between India and Bangladesh, such as the creation of a Joint Working Group on Customs and a Joint Working Group on Trade. Regular meetings and consultations of Customs and trade officials from India & Bangladesh at both central and local levels are held to address issues that require policy directions. There are also plans for introduction of integrated customs management at selected posts, such as Petrapole-Benapole and Akhaura-Agartala. Development partners also assist in the area of cross-border agency cooperation. For example, the ADB through its South Asia Sub-regional Economic Cooperation (SASEC) initiative, and the USAID through its India Pacific Economic Corridor (IPEC) initiative offer assistance in this regard.

Another aspect of CBM is single window (SW), and we find that Bangladesh is yet to implement the SW system. Some preliminary progresses relating to the multiagency SW are made, such as the selection of Customs as the lead agency, the legal and regulatory gap assessment, a documented strategy and master plan including the identity of participating agencies and other stakeholders, their common and unique requirements, etc. But the plan to implement the SW system with loan assistance from the WBG is still at its inception phase.

For acceptance of copies, we find that border agencies do not accept copies of required supporting documents in lieu of the original. Again, because of lack of automated systems, border authorities do not routinely share copies of required supporting documents. Complete automation in the business process of border agencies, and conclusion of customs cooperation agreement with other countries regarding information sharing may improve the situation.

In the area of formalities and documentation requirements, the NBR/ Customs and the MoC adapt their procedures as per recent trends and international best practices. Regarding use of international standards, Customs and other import and export laws and regulations are substantially aligned to the WCO RKC and other relevant international standards. Data standards, such as ASYCUDA World, are used in the case of goods declaration, airway bill etc., and latest Inco-terms etc. are used by commercial banks.

In the area of common border procedures and uniform documentation requirements, we find that customs procedures applicable for import and export goods are the same across the country. The NBR enforces uniformity of procedures and documents through a centralized setting of customs policy and rules. OGAs, including the MoC, also follow uniform documentation requirements across Bangladesh.

To summarise from the above discussion in Sections 2.1 and 2.2, we find that in areas of formalities and documentation requirements, use of international standards, and adoption of common border procedures and uniform documentation requirements Bangladesh has made important progress. In other areas, it has been working to improve the system in collaboration with development partners, but achieving the level of progress that can be termed significant will require more time and sincere efforts from relevant stakeholders. The current position in terms of transition to paperless trade in Bangladesh will become clearer from Table 2.1 below, which attempts a brief stock-taking of the situation in 16 core reform areas highlighted in section 2.1.

Sl.	Core Reform Areas	Current Status
No.		
1	Electronic/automated Customs system	Partially implemented. Responsibility: Customs.
		The NBR has introduced an automated customs system through the ASYCUDA World. But many important components of the software remain unused, including the auction module, domestic transit module, INSPECTION Act, selectivity criteria etc.
2	Internet connection available to Customs and other trade control agencies at border	Partially implemented. Responsibility: Customs + Others.
	crossings	Internet connections are available. But very poor speed and frequent disruption due to cable cut or power outage affect operations of trade agencies including Customs.
3	Electronic Single Window System	Not yet implemented. Responsibility: Customs + Others.
4	Electronic submission of Customs declarations	Fully implemented. ASYCUDA World enables electronic submission of customs declarations.
5	Electronic application and issuance of trade licenses	Not yet implemented. Responsibility: MoC + CCI&E.
6	Electronic submission of sea cargo manifests	Fully implemented. ASYCUDA enables electronic submission of sea cargo manifests.
7	Electronic submission of air cargo manifests	Fully implemented. ASYCUDA World enables electronic submission of air cargo manifests.
8	Electronic application and issuance of preferential Certificate of Origin (CoO)	Partially implemented. Responsibility: MoC. Export Promotion Bureau (EPB) under the MoC implemented this in terms of CoOs for exports of textiles to the European Union (EU). EPB is planning a project to extend this to non-textiles exports to EU and all products to other destinations.
9	Electronic payment of Customs duties and fees	Not yet implemented. Responsibility: Customs + Bangladesh Bank.
10	Electronic application for Customs refunds	Only a pilot testing was done at ICD Kamalapur.
10	Electronic application for Customs refunds Laws and regulations for electronic transactions	Not yet implemented. Responsibility: Customs. Not yet implemented. Responsibility: Customs + Others.
		Proposed new Customs Act will incorporate relevant customs provisions.

Table 2.1: Current status in core paperless trade reform areas:

12	Recognised certification authority	Not yet implemented. Responsibility: Customs + Others.
		No effective certification and digital signature system is in place.
13	Engagement of cross-border electronic data exchange	Not yet implemented. Responsibility: Customs + Others.
14	Electronic exchange of Certificate of Origin	Partially implemented. Responsibility: MoC. EPB shares their certificates on textiles exports to DG for European Taxation and Customs Union (TAXUD) and European Anti-Fraud Office (OLAF). But electronic exchange of CoO to other destinations are not implemented as these are not required under specific RoO agreements.
15	Electronic exchange of Sanitary & Phyto- Sanitary certificates	Not yet implemented. Responsibility: BSTI + Plant Quarantine Department.
16	Banks & insurers retrieving letters of credit (LCs) electronically (e.g. no paper-based documents)	Fully implemented. Banks do receive foreign LCs electronically. Again, banks electronically send copies of local LCs to Customs.

Source: Desk review and interviews with officials.

In concluding this Chapter, it is important to note that our assessment of the situation and interviews with selected officials in Customs and OGAs revealed that while there is a general consensus for, and efforts geared at, reforms aiming to implement paperless trade, there is no dedicated or customised effort to understand and address the particular concerns of marginalised or excluded sectors, including the SMEs and women entrepreneurs, so that reform programmes improve their current situation, and that they can cope effectively with new reforms.

Chapter Three: Potential Groups with Positive/Negative Interests in Reforms

As revealed in Chapter 1, paperless trade system benefits traders, consumers and the country alike in terms of increased speed in border clearance, reduced number of documents, and reduced time and costs of doing business. It also helps improve productivity, quality of management, storage, and retrieval of information and documents through the use of information technology. Moreover, the use of electronic transferable records may also bring other benefits, including the ability to operate 24x7 hours, increased revenue collection, speed and security of transmission. However, it is also necessary to understand the divergent interests of various stakeholders involved in trade, and how they view such benefits of paperless trade as well as the reform initiatives per se.

In addition to Customs and OGAs highlighted in Chapter 2, there are also multiple stakeholders from the private sector involved in international trade and in trade processes, such as importers and exporters, commercial banks, carriers, Customs clearing and forwarding agents association (C&F Agents), courier service providers, and freight forwarders. These government and private sector stakeholders have varied stakes in paper-based and paperless trade. Some may stand to gain significantly from paperless trade while others, or even a section of the potential beneficiaries, may face the possibility of losing the benefits they currently receive from paper-based systems. This Chapter (Chapter 3) attempts at an identification of interest groups having varied interests in the implementation of paperless trade system in Bangladesh. Section 3.1 provides a perception analysis of key stakeholders or interest groups, both from public and private sectors, having either a positive or a negative interest in such reforms for paperless trade. Section 3.2 presents a brief account of the relative clout of different interest groups, while Section 3.3 provides a description of probable risks of implementation of paperless trade in Bangladesh.

3.1 Stakeholders' Perception Analysis

In order to assess the perception of stakeholders towards introduction of paperless trade in Bangladesh, a limited number of interviews and a focus group discussion⁶ (FGD) with major stakeholders were conducted. Results of the interviews and the FGD reveal important insights on their perception, including identification of interest groups for and against the introduction of paperless trade.

3.1.1 Forces having interest in seeing paperless trade reforms:

Findings from the interviews and the FGD indicate that there is an overwhelming support in favour of introducing paperless trade. While there was a huge support from the private sector, there was also support from the government agencies, including Customs and OGAs. An analysis is made here to highlight the extent of their support for the introduction of paperless trade.

The Private Sector: As paperless trade will reduce time and costs of doing business, most private sector enterprises will support paperless trade. A renowned businessman observed during the

⁶ The FGD was organised on 18th July 2017.

interview that most of the established and regular businesses and the industrialists will support paperless trade due to its economic benefits: reduced time in trade transactions⁷, reduced costs and hassle-free trade. He emphasised the need to go electronic because paper is so slow to move. In his opinion, "electronic exchange of data/information will also help 'risk-management' in trade because it will be difficult to manipulate information in paperless trade system" (Interview taken on 13th July, 2017). In this regard, it is to be noted that manipulation or forging of documents is not uncommon in Bangladesh⁸. Another businessman (a director in a renowned company) mentioned that in ideal cases, no one should have any reason to oppose paperless trade as it benefits all. Experts also mention that the paperless trade system will help the country cut costs of doing business to some extent. Experts from think-tanks and research organisations also support paperless trade. For example, in the words of the Executive Director of Policy Research Institute of Bangladesh: "It will cut down trading costs and time. Time is money as well" (Daily The Financial Express, 21st April 2017). Introduction of paperless trade will contribute to enhanced collection of revenue. He, however, mentions that paperless trade still poses some risks in Customs valuation, should there be any connivance between the foreign supplier and domestic importer (or if the parties are related). They may understate value of import goods in electronic exchange of information (Interview on 12th July, 2017).

Government Agencies: Similarly, government officials, who want to modernise trade procedure by adopting digital technology also support paperless trade. Let us now focus on those that favour such reforms.

(i) Customs: As explained in Chapter 2, Bangladesh has been using ASYCUDA World since July 2013. Through ASYCUDA, documents/data can be received and shared/transferred with other stakeholders (e.g. banks, importers/exporters, port authorities etc.). ASYCUDA system is globally recognised automated Customs processing system, and permits paperless trade system. As Bangladesh Customs uses the ASYCUDA system in all Custom houses and most of the Land Customs Stations, it can be said that in terms of training and infrastructural requirement for the paperless trade system, Bangladesh is well positioned. Moreover, Customs officials received training on ASYCUDA, and are competent in using the system.

The Government decided to promote paperless trade by establishing a National Single Window (NSW) by mid-2019. The NBR has already taken steps to launch the NSW with financial and technical assistance from the WBG. In this regard, a working group was formed in 2016, and a 12-member Procurement Team was also formed to implement the NSW (NBR, 2016⁹). The Development Project Proforma/Proposal (DPP) of the project was sent to the Planning

⁷Time taken to complete trade transactions worries them. For example, shipping iron ore from Australia to Shanghai might take 8 to 10 days in the case of use of electronic documents (including e-bill of lading), but paper documents might take 20 days to get to the same destination

⁸ Even the NOCs/certificates issued by the BSTI are often manipulated in Custom Houses. For example, Benapole Custom House has recently detected a forged or doctored BSTI letter no 36.005.000.09.03. 3192. 2014/145(1), dated-12/07/2017. This BSTI NOC was doctored by the importer or his agent.

⁹ NBR nothi no 1(27): Customs Modernisation/World Bank/Trade & Transport Facilitation/2015/(part-02/300 dt. 31/05/2016

Commission, and is currently under review. Customs has been selected as the lead agency for the implementation of NSW (Interview with an NBR official, July, 2017. Once implemented, the NSW system will effectively link all relevant agencies and allow simultaneous processing and clearance of all permits, licences, approvals and Customs requirements electronically via one integrated gateway. It will also include a facility for electronic payment. The NSW, when implemented, will thus facilitate electronic exchange of documents/data between traders and relevant government agencies. In that way, it will allow stakeholders involved in export-import activities (e.g. the Bangladesh Bank, commercial banks, the Office of the Registrar of Joint Stock Companies and Firms, Bangladesh Investment Development Authority (BIDA) and other service-providing agencies) remain connected with each other through the NSW trade super highway to submit standardised information and documents with a single entry point instead of submitting paper-based documents.

With the implementation of NSW, commercial banks, importers and other stakeholders will be able to submit and share documents or licences or permits through ASYCUDA or NSW. Although the NSW project is still at its inception phase, this is a favourable factor for implementation of paperless trade in Bangladesh.

(ii) Bangladesh Bank: Bangladesh Bank is determined to completely digitise the banking system. It is going to introduce paperless banking system soon (Bangladesh Bank, 2013). The central bank and the NBR started implementation of electronic LC for imports from 2nd February, 2015, to facilitate the country's foreign trade (Islam, 2015). Accordingly, Bangladesh Bank currently provides information on LCs to the Customs systems using its foreign-exchange transactions and monitoring system (known as 'dashboard'). It also shares EXP form with Customs. ASYCUDA World now accepts and assesses goods declaration on receipt of LC information electronically. It signifies banks' readiness and mindset to move from the paper-based to the electronic trading environment. Bangladesh Bank, as the regulatory authority, is determined to move to paperless environment, which also means that the commercial banks are expected to support launch of paperless trade. Moreover, one of the requirements for paperless trade is "banks' provision/ability to retrieve LCs electronically without lodging paper-based documents. Discussion with a central banker on 12th July, 2017, revealed that banks in Bangladesh retrieve LCs electronically without lodging paper-based documents. This also indicates that commercial banks have no logical reason to oppose any initiative aimed at introducing paperless trade.

(iii) CCI&E Office: The CCI&E Office is the government agency entrusted with the responsibility to issue trade licences and import and export permits. The CCI&E has undertaken an initiative to issue trade licences electronically, through a project named '*Online licencing module* (OLM)'. Under this project, hardware will be procured using the money from the revenue budget of the Government while software will be provided under financial support from the WBG (Interview, on 11th July, 2017). Progress in implementation of the OLM is at its final stage; and it is expected that the CCI&E will be able to receive and issue licences or permits online from 2018 onwards.

(iv) Department of Agricultural Extension (DAE): The DAE is an important government agency under the Ministry of Agriculture dealing with, among others, phytosanitary issues. Importation and exportation of all plant and plant products require licence and permits from the Plant Quarantine wing of the DAE. The DAE has undertaken an initiative to digitise its licencing and permit regime to facilitate trade, through a project titled "*Bangladesh IC for Industry: Agribusiness; Project ID: 584287*)", which is funded by the WBG. A senior DAE official expressed optimism (in an interview on 12th July 2017) that they would be able to receive application for licences and permits electronically, and issue Import Permits and Phytosanitary Certificates from 2018 onwards. Thus it is evident that the DAE has made good progress in automating its licence/permits regime. This will significantly contribute to paperless development. The respondent from the DAE also made it clear that they are keen to introduce paperless systems to improve their efficiency and effectiveness.

Standardised or harmonised certificates/permits will be necessary for cross-border paperless trade too. But there is no visible progress to that end.

(v) Port Authorities: As a border agency, port authorities (e.g. Mongla/Chittagong Port Authority or Bangladesh Land Port Authority) also support Bangladesh government's initiative for paperless trade. Among them, the Chittagong Port Authority is well in terms of its preparedness in supporting paperless trade. For example, as explained in Section 2, common interface has been introduced at Chittagong port to harmonise the processes between Customs and port authorities, but not in other places. Necessary direction, policy supports and development of ICT infrastructure and human capital will help the port authorities to be integrated in paperless trade.

(vi) The BSTI: The BSTI has also taken steps to streamline its processes to switch over to electronic environment. It has undertaken modernisation initiatives related to automation, capacity building and business process re-engineering to simplify the clearance process. The BSTI, under a cooperation agreement with the WBG, started implementing a project to automate its Certification Mark (CM) in 2015 (Yusuf, 2015). Automation of its CM system has been completed with the installation of a software by *Synesis IT* (Interview with a BSTI official, 26th July, 2017). The CM officials have also received training on how to operate the CM software. The automated system of CM will go live within three months after the signing of Service Level Agreement between the BSTI and the software developer firm *Synesis IT*. Other capacity building activities of the BSTI to enable its officials to work in an automated environment are currently on. Therefore, we may conclude that there will be support from the BSTI to any initiative for paperless trade.

(v) The Competition Commission: The main function of the Competition Commission (CC) is to promote competition in the market in the interest of consumers through defeating anticompetitive practices and preventing mergers that will have the effect of substantially lessening competition. An effective Competition Commission benefits wider customer groups and contributes to a favourable business environment for all enterprises, big or small. Paperless trade will help Competition Commission have evidence of proper pricing of imported goods and exported goods. This will help effective monitoring of markets to enforce competition policy and prevent trade-based money laundering. Furthermore, an effective and efficient CC can play a complementary role to implement paperless transactions. For example, the Competition Commission may encourage the merging parties to file electronically and include a Compact Disc of the merger filing to move to a paperless filing system. Capacity enhancement of the Competition Commission will help the CC to support overall objectives of paperless trade. Discussion with CC officials suggest they will fully support paperless trade as it will facilitate discharge of their functions.

3.1.2 Interest groups who may not favour paperless trade:

Although an overwhelming majority of stakeholders were found supportive of paperless trade, few stakeholders may try to find excuses to delay, if not oppose, paperless trade. While no one vehemently opposed paperless trade, few tried to say that "paperless trade is good for us; but it needs a lot of preparation and take time". These are the respondents who thought they may lose the benefits they currently enjoy under paper-based system.

The Scoping Study finds that the beneficiaries of the existing systems of paper-based trade will be the potential opposing force to introduce paperless trade. Questions may arise here: who are the beneficiary interest groups, who may be against the introduction of paperless trade system. The answer might be such: these are the actors in trade who take illegal benefits by exploiting the paper-based systems. They may include - corrupt officials, C&F agents (except those with integrity), some of the freight forwarding agents and dishonest traders resorting to illegal (at times criminal) practices to maximise personal gains.

Moreover, small private businesses are mostly not well-equipped till date to switch from paperbased to paperless trade (i.e. trade transactions using electronic rather than paper-based data and documents), and are not comfortable with internet-based solutions. So these small businesses may have reservations to move to paperless trade and may ask for phased-in implementation of paperless trade.

Interest groups that could be against paperless trade, and reasons for their opposition or reservations are examined below:

(i) C&F agents: A leader of a C&F Agents Association said that they would definitely support any initiative of paperless trade. However, it is also true that a large section of Customs C&F agents, especially small ones and ones who have vested interests in existing paper based system, may be the main opposing interest group. This is because the agents will not have much job/work left to do after the full-fledged implementation of paperless trade. Importers or traders will be able to complete trade formalities, such as submission of goods declaration, payment of duties and taxes, getting Customs clearance/release order and applying for refunds online, on their own. Moreover, as most C&F agents now prepare necessary documents for Customs clearance of imported and exported goods manually, and interact with Customs and port authority in person, they may think that paperless trade environment will result in disintermediation and make them unemployed. So they may be the main force to oppose paperless trade. Again, especially the unscrupulous agents, who tamper with documents to minimise tax liability through evasion of taxes by misdeclaration, and gain a large amount as fees from the concerned trader in recognition of their mischiefs, will find it difficult to do so in a paperless trade environment. They therefore would oppose paperless trade (Interview with a Customs official, on 25th July). However, established agents having computer system and of high integrity will not stand against reforms for paperless trade.

(ii) **Traders:** Dishonest traders, who manipulate the paper-based trade procedures to evade duty and taxes, may oppose the introduction of paperless trade. Honest but small traders may also oppose the new system. For example, an importer (who also holds a leadership position in Bangladesh C&F Agents Association) mentions that small importers may not like the introduction of paperless trade for two reasons:

- Lack of awareness about the facilities available for paperless trade system in Bangladesh and its benefits.
- Lack of computer, internet connectivity, training and office.

(iii) SMEs: As stressed in Section 1, businesses will evaluate paperless trade in terms of costs and benefits. If they see their benefits of adoption of paperless trade outweigh costs, they will embrace paperless trade. They will also examine their capacity to embrace paperless trade. Implementation of a paperless system can be the answer to many of the impediments faced by the SMEs. The system can bring proportionally larger benefits to SMEs. A study of UNESCAP showed that a reduction in Customs and trade clearance times increases SMEs' participation in export or international trade comparatively more than that of larger enterprises (Duval and Utoktham, 2014). However, due to the small volume of their trade and the needed initial investments in hardware, systems development, internet connectivity and skills development for moving to paperless trade, small traders may find paperless trade problematic and not cost-effective. One respondent indicated that he was happy with current paper-based systems and does not want to go to a new unknown system. It is, however, true that paperless trade can afford SMEs better trade opportunities, including access to foreign markets.

(iv) Freight forwarders: Freight forwarders do not have direct conflict of interest with the paperless trading system as they are not directly involved in declaration of goods to Customs. However, a small portion of them, who somehow assist the traders in the mis-declaration process for some additional profit, might have reservations to the automated system. Discussion with Customs officials revealed that in recent years, containers of few import consignments arrived in Chittagong Port empty (or with sands) although they were declared otherwise. As the main carrier of imported goods and having control over the entire supply chain, freight forwarders' involvement (or prior knowledge) in such malpractices cannot be ruled out. Paperless trade will defeat such fraudulent practices, and as such those small section of unscrupulous freight forwarders will have a negative interest in paperless trade reforms.

(v) Courier service providers: It appears that there are no reasons for established courier service providers to oppose paperless trade. Globally, DHL and FedEx deals in paperless trade. But in

Bangladesh, it is learnt that some courier service providers (especially larger ones) are not providing single source manifest or Airway Bills (with details of House Airway Bills i.e. House AWBs link with Master AWBs) to Customs systems (through respective airlines/agents) electronically¹⁰, even though it was a decision in a meeting between courier service providers, airlines and Customs. (Discussion with a senior Customs official, 20th July 2017). Major courier service providers are perhaps opposing the decision of sending AWBs electronically from a single source (i.e. from transportation/airlines) to Customs systems (through airlines) on two grounds:

- Their authority will be diminished. In other words, once the HAWBs [prepared by DHL (of origin country) against MAWB] is electronically shared with Customs through airlines, their business of clearing goods (through C&F agents linked with them) coming through couriers will be reduced. Currently, a C&F firm named AIMS Service is operational in Dhaka Custom House. This agent is linked with a renowned courier service (and owned by one of the directors of the courier service).
- Courier service providers' costs of doing business may increase as they have to develop a software to electronically send HAWBs and other documents to Customs.

Thus it is clear that although courier service providers are not against the concept of paperless trade in general, they are not willing to engage in every aspect of paperless trade.

(vi) A section of public officials: A section of public officials, who gets benefits by conniving with dishonest traders and in clearing imported goods and export consignments, will also not be favourable to the idea of paperless trade. They, however, will not have the courage to officially oppose the introduction of paperless trade, and therefore will not be a force against the Government's strong desire to move towards paperless trade. (The concerned authority in the FGD indicated that steps are underway to ratify the UNESCAP Framework Agreement. It has already obtained approval of the Cabinet to do so.)

3.2 Relative Clout of Different Interest Groups/Stakeholders

Although there are interest groups who may oppose introduction of paperless trade, it can be argued that, in terms of advocacy, groups supporting paperless trade possess more strength and clout. This is because paperless trade increases transparency, enhance speed in trade processes, and reduce time and costs of doing business. Moreover, prevention of document forgery is, to a great extent, possible under paperless trade. Furthermore, in the era of digitisation and with the abundant evidence of significant benefits of electronic exchange of information, there exists no sound basis to oppose introduction of paperless trade. The Government also puts a strong emphasis on 'Digital Bangladesh'. As such, interest groups favouring paperless trade have stronger support base to push and expedite reforms for paperless trade.

On the other hand, interest groups who may have misgivings against paperless trade appear to be feeble, as they have no strong and logical basis to oppose paperless trade. Findings of the Scoping

¹⁰ It is a requirement under section 13 (ka) of the Courier Service (Assessment) Operation and licencing Rules, 2016. (Customs SRO No 270 of 23 Aug 2016).

Study give an impression that the forces opposing implementation of paperless trade may argue to defer the mandatory introduction of paperless trade, but they cannot expressly oppose it or can deny the benefits arising out of it. They may ask for more time to move to paperless trade only on one ground such that the relevant agencies do not have necessary hardware and training/skills and capacity to go for paperless trade. However, provision of financial and technical support and training in paperless trade will obviously neutralise their arguments. Thus, it is clear that when it comes to the issue of implementing paperless trade, negative interest groups are not in a position to overpower positive interest groups. Instead, power groups supporting paperless trade will be able to influence opposing camps, and transform their negative perceptions by showing the benefits of paperless trade and making them aware that by not implementing paperless trade they will fall behind their peers and lose competitiveness.

Therefore, the potential balance of power around change, i.e. reforms to switch to paperless trade, is largely positive, for the ground reality, reflected in the existence of a very strong commitment among policymakers, citizens and private sectors for a pro-people and pro-development reform, makes the position of groups/organisations (e.g. corrupt officials, dishonest traders, agents who at times manipulate documents to gain personal benefits etc.) weaker compared with those favouring change. Findings from the validation workshop for the Scoping Study reveal that even the C&F agents and the freight forwarders did not oppose the initiative; rather they expressed their support for facilitating paperless trade. Indeed, there seems to have a consensus among major stakeholders to switch from existing paper-based to paperless trade. Possible reservations of the SMEs due to costs and capacity limitations may also be overcome with greater awareness building on the potential benefits of paperless trade and some policy support programmes.

However, despite all these possibilities in favour of implementation of paperless trade reforms, it cannot be ruled out that interest groups having negative perception towards paperless trade might still have hidden authority, interests, lobby and the ability to influence the reform. As such, these issues must be considered in making necessary policy measures and strategies for paperless trade. Furthermore, it will have to be kept in mind that policies taken by one political government is often scrapped or discontinued by another political government irrespective of the merits of such policies. Therefore, the ideal policy would be to interact with interest groups, other political parties, NGOs, media and civil society, and bring them on board to generate a momentum in expediting paperless trade reforms.

3.3 Probable Risks in Implementing Paperless Trade

As explained in Chapter 2, the Customs Department is well ahead of other border/trade agencies in terms of their preparedness for implementing paperless trade. Keeping within that given background, an attempt is made here to highlight the probable risks in implementing paperless trade in Bangladesh:

(1) **Resistance to change by stakeholders:** It may be the case that the negative forces/interest groups identified in Section 3.1 will try to resist introduction of paperless trade in Bangladesh as they are the beneficiary of paper-based systems. Moreover, resistance to change is a universal

characteristic of human nature. Initially, stakeholders may not welcome paperless trade due to a lack of awareness about its immense benefits, lack of technology, lack of facility (e.g. computer systems, internet, and capacity gaps) and fear of the unknown. Necessary awareness programmes and trainings on how to work in a paperless environment will therefore be necessary.

(2) Vulnerability: As necessary data and documents will be exchanged and used electronically in paperless trade, there exists a risk of viruses, "hacking", or the accidental release or theft of information. Necessary security measures (including preventive measures to protect information from security loopholes, such as the use of anti-virus, checking if ports are open). The use of 'digital signatures' in documents/data to be electronically exchanged will reduce this vulnerability. If a digital signature¹¹ is used in a document, this document remains intact/encrypted and no one (other than the authorised recipient who will get a code to decode the document) can access or tamper the document. Although Bangladesh ICT Act 2006 (amended in 2013) was enacted to popularise and implement digital signatures, digital signature is yet to get wide acceptance because use of it is not compulsory. Persons/organisations are given authority (Licence) to activate (give) digital signature by Controller of Certifying Authority, an authority of the ICT division. (Interview with Dr. M. H, ICT division, 16th July 2017).

(3) Fraud: Although digitisation may reduce the incidence of fraud due to better control over the data and documents as well as easy means of verification of these data to be exchanged electronically, the potential for fraud in electronic systems cannot be ruled out. Indeed, there exists significant potential for fraud in electronic systems (Laryea, 2002).

(4) **Coordination problems:** Different government agencies have implemented several measures in automating their systems. For instance, banks now share their LCs¹², EXP form and other import export documents (except payment) electronically with ASYCUDA World. Bangladesh Export Processing Zones Authority receives and issues Import Permits and Export Permits electronically to its 464 industrial units located in eight Export Processing Zones (EPZs). A common platform and a lead agency will help resolve coordination problems and facilitate paperless trade. This problem will largely be overcome if the proposed NSW and the CBM programmes are implemented.

Finally, it can be concluded that in any change process or new initiative, force field analysis usually reveals both the favourable forces and opposing forces to change. It is the leadership commitment, awareness programmes about the benefits of paperless trade and the provision of necessary resource and policy support that may help effective implementation of paperless trade. In particular, actual benefits and impact after the implementation of paperless trade (paperless customs and single window) have to be communicated/shared with stakeholders to make them willing to join paperless trade.

¹¹Digital signature ensures integrity of digitised documents/information. Digital signatures have to be renewed each year. It is a time bound certificate.

¹² Letter of credit comes through SWIFT.

Chapter Four: Inclusion of Marginalised Groups

Participation of marginalised groups in formal trade is found to be quite insignificant in the overall trade of Bangladesh. For the Scoping Study, we have considered the SMEs, women entrepreneurs and youth entrepreneurs as marginalised groups in trade. Inclusion of these groups in the mainstream business can be achieved through proper implementation of paperless trade in Bangladesh. Participation of these small businesses can also be increased manifold through paperless trading system.

4.1 Small and Medium-Sized Enterprises

The SMEs are considered world-wide to be one of the driving forces in employment generation, poverty reduction and economic growth. The SMEs in Bangladesh are also no exception, as they make a similar contribution to the national economy. In terms of definition of SMEs, according to *Industrial Policy 2016*, a manufacturing unit having an investment from taka 75 lakh to taka 15 crore with a manpower ranging from 31 to 120 is considered a small-sized enterprise, and taka 15 crore to taka 50 crore with 121 to 300 employees is considered a medium-sized enterprise. For a service industry, the investment range is taka 10 lakh to taka 30 crore with a manpower of 16 to 120.

Almost 45 per cent of manufacturing value addition, about 80 per cent of industrial employment, about 90 per cent of total industrial units belong to the categories of SMEs in Bangladesh. In terms of employment, about 25 per cent of the labour force is employed in SMEs¹³. The sector has provided jobs to 15 lakh people between 2009 and 2014. Contribution in export earnings from the SMEs vary from 75 per cent to 80 per cent. There are almost 79,754 SMEs of which 93.6 per cent are small and 6.4 percent are medium (Khan, 2016).

4.1.1. Factors Affecting the Participation of SMEs in Trade:

Around 40 per cent of the total gross domestic output of the country comes from the SMEs. The industrial contribution of small enterprises in GDP has increased insignificantly, only by 0.36 per cent over the last 10 years. For medium and large industries, the growth rate is around 4.27 per cent. This poor performance can be attributed to a number of factors, such as limited access to finance, regulatory bottlenecks, lack of access to market and other information, procedural obstacles in doing business, lack of technical know-how, higher costs of compliance with regulatory requirements, limited access to suitable transaction mechanism, limited connectivity with potential buyers, etc. These explain their lack of competitiveness, which in turn hinders their growth in both local and domestic market. Moreover, it is difficult and costly for SMEs to comply with market-based standards and procedural requirements, which are not harmonised. This also affects their penetration in foreign markets and participation in global value chains. An explanation of how these factors affect the participation of SMEs in trade is provided below:

¹³ http://www.thedailystar.net/supplements/24th-anniversary-the-daily-star-part-2/potential-small-and-mediumenterprises-70927

(1) **Competitiveness:** Practicing a paperless system and promoting it through government policies, keeping in mind the needs of the SMEs, can significantly improve their performance in formal trade, both local and international. A major obstacle for SMEs in getting involved in that kind of formal trade is the lack of competitiveness compared with that of large businesses, which frustrate their potential business. As discussed in previous chapters, paperless trade can drastically reduce the time and cost of trade, which ultimately results in improved competitiveness. It also ensures easy compliance with local and international regulatory mechanism. Therefore, a paperless system can ensure more direct engagement of SMEs in mainstream trade. Also, a paper-based system requires interaction and contact with many government and private offices to complete the documentary procedures, which subject them to hassle.

(2) **Regulatory procedural bias:** Regulatory procedures do not provide preferential treatment to the SMEs making it difficult for them to comply. They need to obtain different clearances and obtain licences separately, from various agencies, which involve duplication of efforts, loss of time, harassment and unofficial payments (Bakht and Basher, 2015). In addition, there is a negative bias against the SMEs in administrative procedures. Established businesses sometimes get some extra benefits from the system that the SMEs do not, which make compliance even harder. A paperless system can remove all these barriers, significantly reduce the level of corruption, and can ensure an unbiased administrative procedure for the SMEs.

(3) **Requirement of documents and standards:** Many of the SMEs mentioned that maintaining a huge number of documents and complying with documentary procedures are problematic for them as they have human resource constraints. Big businesses mostly have separate departments and a pool of officials to maintain all the procedures, but for the SMEs most of the works are done by the entrepreneur himself. Doing all the paper-works is troublesome and time and resource consuming. Moreover, the SMEs do not have access to, or knowledge of, the legal and regulatory procedures. They have to visit several offices to get all the procedures in place. Implementation of a paperless system offers them the solution for all these hassles. Another benefit of paperless trade is harmonisation of procedures and standards. This will greatly benefit the SMEs and will enable them to comply easily with the harmonised system.

The SMEs trade in a limited volume of products, and when compared in terms of transaction costs, it is seen that such costs outweigh the benefits. Many of the SMEs have stressed that for exporting a small consignment of 100 pcs, they have to go through tedious paperwork, which involves so much cost and time that they often miss the shipment date. One SME entrepreneur even mentioned that she had to send the goods by air instead of by a ship as the paperwork took too much time. This frustrates their competitiveness in the global market. If procedures are made paperless, these hassles would definitely be removed, according to the SMEs.

(4) Access to finance: A survey conducted by INSPIRED (2013) shows that 68.6 per cent of small enterprises and 44.7 per cent of medium enterprises identified access to finance as a major constraint. The loan administration process is costly as it requires several documents and involves several procedures. The application process is also cumbersome and lengthy and the SMEs face

difficulties to comply with those and as a result face constraints in access to finance. The system of loan processing, especially in public banks, involves high transaction costs in terms of time and unofficial payments (Bakth and Basher, 2015). If the paperless system is implemented, commercial banks and other financial institutions would have a structured, harmonised and simplified e-system, which will make it easier for the SMEs to apply for credits. The level of corruption in granting loans will also be removed through an accountable paperless system.

(5) Availing the incentives: Moreover, the Government provides several incentives (e.g cash incentives, duty drawback) through different policies. However, taking advantage of those requires a lot of paperwork. The paperless system will ease the process of claiming refunds or other incentives, which will ease the difficulties faced by the SMEs. The paperless system also includes electronic transaction mechanism, and with implementation of the system, electronic LCs, electronic bills of lading etc. would be introduced, which will quicken the trade transaction process.

4.1.2. A Cautious Approach:

It is worthwhile to mention here, as a word of caution, that the SMEs, in most cases, lack the technical capacity to use electronic-based online system. Many do not have the necessary manpower to run their business in paperless form. Moreover, recruiting such technically sound human resource can be costly for them. Therefore, some of the SMEs might have reservations against adopting the paperless system. Their volume of business is not that high. For them the cost to change may outweigh tangible benefits. Also, they are used to working in a manual and paper-based environment, and might not have the mindset to change. The SMEs therefore may not want to use the new system. To motivate them to shift to the new system, actual benefits of the paperless system will have to be publicised.

While designing the implementation strategy for paperless trade, all these should be kept in mind. A thorough research on the existing capacity gaps of the SMEs in adopting the system should be conducted. Studies should also be made on associated risks and constraints that the SMEs might face while implementing the system. Based on the findings, trainings and advocacy programmes should be designed for increasing their capacities. A separate set of actions is necessary for the SMEs, since they face different types of challenges. Identification of different types of SME's should be made and their needs should be analysed so that policies could be formulated accordingly. SME development strategies should vary depending on the types of business or region.

SMEs could be given training on online business registration, online Customs valuation, NSW and other necessary platforms so that they can use and take the maximum benefit of paperless trading system. Advocacy programmes should also be taken in order to create awareness among the SMEs of the huge benefits that the paperless trading system could bring to their business. Groups of SMEs, who actually have the potential to improve their position in mainstream trade should be selected first and be given priority in terms of capacity building.

Once these are adequately addressed and the SMEs are ready to use the system, their participation in mainstream local and international trade could see a manifold increase. They will have an easy access to business information, have efficient resource management and improved competitiveness, and be able to become the driving force behind the country's economic growth.

4.1.3. Probable Entry Points:

- In-depth analysis of the procedural constraints is necessary. For this, the SMEs should first be clustered based on their size and business, as their challenges, in many cases, might be unique. The division is also important for designing effective policies for each group.
- Assessment of policies, designed for the SMEs, is necessary for figuring out the gaps in each, separately. In case of absence of policy in an area, policy brief could be suggested based on the findings of actual challenges faced by them. Co-ordination of different policies should also be considered in this regard.
- Examining overall documentation procedures for the SMES at different levels and identifying documents and processes which could be eliminated to facilitate their business. This will ease the procedural obstacle faced by the SMEs.
- The SMEs need training for market integration and international marketing strategies to improve their position in the global market. Due to lack of their capacity, they are not being able to penetrate the international market vigorously. They do not have knowledge on several standard requirements, market access conditions, opportunities and preferences, Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) requirements etc., which hinder their performance while entering international market.
- Many of the SMEs do not have proper knowledge of availing ICT-based services due to which they might have reservations in implementing the paperless system. Training and capacity-building on online submission of documents and online transaction methods is very much important. Providing technical and technological support to them for making them comfortable with the paperless system should also be given importance.
- Motivational approach is also necessary for the SMEs as they might not feel encouraged to shift from their existing practice. Incentives can play the role and encourage them to shift to the new system. Moreover, advocacy programmes for popularising the paperless trading system among SMEs is beneficial to changing their mindset against the system.

4.2 Women Entrepreneurs

Bangladesh has, over the past decades, made significant progress in gender issues. However, women's participation in career-oriented activities are not as good as could be expected. Women's involvement in entrepreneurial activities is an essential part of any country's socio-economic development. Bangladeshi women, in many cases, have successfully come out of the orthodox social structure and moved forward from being homemakers to entrepreneurs, workers, political leaders and so on. They now contribute to business and export growth, supplies, employment generation, productivity and skill developments. The social context for women has witnessed some

change, as data from Bangladesh Bureau of Statistics (BBS) show that women-led households have seen a six-fold increase during the last one decade. In 2013, the total number of women-owned economic households stood at 0.363 million as opposed to only 62,255 in 2003.

However, despite achieving a modest progress in women empowerment and holding the 10th position among 136 countries in women empowerment¹⁴, Bangladesh still struggles to provide a favourable environment for women in terms of empowerment and economic engagement, as women continue to face challenges and hurdles that their male counterparts do not. As per the demographic structure in Bangladesh, around 49 per cent of the country's total population is women¹⁵, of which only 18.2 million are economically active¹⁶. Again, among the total employed population, only around 29 per cent is female. Encouraging women in economic activities, and creating space for them in such activities, therefore, assumes a great urgency, especially to ensure a smooth running of the wheels of the economy.

Women currently work in different sectors accessing micro-credits and doing small businesses. Nonetheless, their contribution is not apparent in mainstream trade. Again, more and more Bangladeshi women are getting involved in business start-ups, generally on a very small scale, directing their sales to the local market. Entrepreneurship in women is evident in many sectors, such as sewing, dressmaking, beauty parlour, embroidery, handicrafts, design, livestock and poultry, fishery and aquaculture, food and confectionary, and nursery export promotion¹⁷. Studies suggest that women entrepreneurs constitute more than 10 per cent of the total business entrepreneurs in Bangladesh¹⁸. Data from the Gender Statistics, 2012, suggest that only 7.21 per cent of the business establishments are headed by women, which was 2.80 per cent in the years 2001 and 2003. Share of the female engagement in the cottage, micro, small, medium and large establishments were 10.70 per cent, 22.16 per cent, 11.46 per cent, 23.73 per cent, 46.01 per cent, respectively, in 2012¹⁹. In terms of areas and activities of women employment, 38.2 per cent employment is generated through craft and related trade works. Agricultural activities are second in this respect (35.1 per cent). Again, a huge number of women are involved in traditional and informal sectors. For example, around 8.4 million women work in the households and 15.2 million in the informal sector, though their contribution is not recognised as such in society. As a result, participation of women in formal registered business is quite low.

Elimination of gender inequality and improving women's economic empowerment are essential to boost economic growth of a nation. Engaging women in formal business more aggressively is one way to increase the social and economic power of women. The Scoping Study uses the GESI dynamics to understand different dimensions of implementation of paperless trading system and the inclusion of women entrepreneurs in mainstream trade through the transformation. The gender

¹⁴ Gender Gap Report, World Economic Forum 2014.

¹⁵ Gender Statistics 2012, Bangladesh Bureau of Statistics.

¹⁶ Labour Force Survey, 2013.

¹⁷ Women entrepreneurs in SMEs: Perspective Bangladesh

¹⁸ <u>http://www.thedailystar.net/supplements/25th-anniversary-special-part-4/emerging-women-sme-entrepreneu</u>

¹⁹ Economic Census' 2013

equality aspect identifies strategies to overcome the unique challenges women entrepreneurs face, and through implementation of those strategies, approaches of economic empowerment of women in society could be designed. The strategies and approaches will ensure effective participation of women in trade and business. However, the lack of accurate gender-specific data on women's engagement in business makes it difficult to figure the exact picture that exists in society.

4.2.1. Approaching Gender Equality and Social Inclusion through Paperless Trade:

Gender equality refers to providing equal opportunities to men and women and providing them with the scope of getting engaged in economic, social, cultural and political endeavours. It is one of the means of achieving sustainable development. The root cause of gender inequality may be attributed to traditional social norms and dominance of male in family and workplaces. These hinder women's access to resources and make their positions in society inferior. Improved economic solvency of women can be the key to achieving social inclusion by reducing barriers of social acceptability. Participation in trade and business provide women with the chance of being more vocal in economic and social decision-making process. Through the engagement, the distribution of income can become less skewed towards men, providing better economic empowerment to women, and thus reducing the vulnerability of their social status.

In a developing country context like that in Bangladesh, women are mostly found doing informal jobs or working unpaid as family labourer. Though the figures of employment of women in formal trade and business activities have improved over the years, the situation is not quite satisfactory yet. Although there is no doubt that active participation of women in economic activities have contributed to the modest growth of Bangladesh, a very limited number of women are heading formal businesses in the country. A study by the Asia Foundation (2011) shows that the range of products that women mostly trade in is quite narrow and limited to handicrafts, dress-making, some processed food etc., which have minimal value addition²⁰. Broadening their areas will promote their opportunities in social and economic decision-making process. Several policies by the government have been developed to facilitate trade and business in the country. However, having gender insensitive policies or disproportionate exclusion of women from the benefits limits the growth (CIDA, 2003).

Many of the challenges that women face while doing business are due to their inferior status in society. They lack access to resources, finance and network, which limit their ability to diversify. SMEs in general face the constraint in accessing finance, which is even higher when it comes to women-owned or women-managed enterprises. The social acceptability of trend of women coming into business is not reflected in the attitude of the lending agencies and they create additional obstacles for women out of social stigma (Bakht and Basher, 2015). Also, due to their small size of business, women face higher trade costs while complying with procedural and other issues, entry into market and being productive. Cultural factors or social behaviour toward women, social restrictions, especially in rural area, education etc. are among the other impeding factors. Enabling

²⁰ <u>http://asiafoundation.org/2011/06/08/where-are-bangladeshs-businesswomen/</u>

a women-friendly business environment will not only improve their participation in formal trade, but would also provide them with a better position in society through economic empowerment. Implementation of paperless trade can help achieve the goal, as it has the potential to substantially reduce trade barriers for women and engage them more actively in business activities.

Implementation of paperless trade can encourage positive scopes for changes in the following areas:

(1) **Business procedures:** In a cumbersome business environment like that in Bangladesh, managerial and logistic skills are necessary to start and run businesses. Through interviews and consultations with stakeholders, it was found out that difficulties exist in the business environment that limits the opportunities for women to participate in the mainstream trade. They face problems in understanding and complying with difficult paper-based trade procedures. Introducing paperless trade will help them better understand business procedures. Paperless system will significantly increase the participation of women in mainstream trade and encourage newcomers in trade.

(2) Access to information: Women have limited access to business-related information. A study by the Manusher Jonyo Foundation (2016) have identified that the most valuable kinds of information for women to achieve greater economic empowerment and rights were information related to education, property, and business related/trade licence and starting a business. At present, the marginalised group of women do not have adequate knowledge on business procedures and hence often get involved in informal trade. At present, starting a formal business requires to go through a lot of procedures starting from business registration, obtaining trade licence, TIN registration, VAT registration, Customs clearance etc. For completing all these procedures entrepreneurs require to visit several offices, which is especially difficult for women entrepreneurs as the social environment do not favour such exercises by them. According to the study (*Ibid*), reasons behind their limited access to information include - lack of awareness, lack of knowledge on where to go, safety and mobility issues to go to government offices, lack of justice and security etc. Transformation to paperless trade will allow women to complete all procedures without visiting several offices. Moreover, it will provide easy access to all trade-and business-related information, which will enable them to have better connections with markets and buyers.

(3) Business network and market access information: Women often have limited access to information on products and their potential markets. They have less knowledge on different market access conditions, where and how to export, what might be a potential product for a particular market, what the country-specific requirements are, what the incentives are etc., due to the restricted scope of their network. This information gap limits their participation in international trade. Once paperless trade is introduced, all these information will be available under one platform, which would improve their network and connectivity with international market and their business would be diversified internationally. Moreover, the system would provide the women entrepreneurs with opportunities to improve their marketing techniques.

(4) Access to finance: Access to finance is another challenge that women entrepreneurs often face, as in the case of the SMEs. Several micro-credit programmes provide loans to rural women

entrepreneurs but at higher rates of interest or prohibitive collateral. Moreover, the burden of high interest rates does not allow their businesses to flourish to their fullest potential. In many cases, women entrepreneurs are not familiar with banking regulations and the process of credit taking. Therefore, they are unable to compare different schemes of credits and miss the chance of getting credit at a competitive rate. A paperless system makes the overall banking process easier, provides easy access to loan-related information to women without making them visit different institutions.

4.2.2. Possible Entry-Points:

Even though the transformation to paperless system will bring numerous opportunities for women entrepreneurs, some women-focused strategies needs to be undertaken to reap the benefits. Therefore, identification of possible entry points and a separate course of action focusing on them is necessary. Some possible entry points are highlighted below:

- Several policies are in place for facilitating women entrepreneurship in Bangladesh. Identification of areas, within such policies/guidelines, where reforms are needed to facilitate implementation of paperless trade should be made.
- As women are lagging behind men in terms of technical knowledge and capacity in availing themselves of ICT-based services, providing specialised trainings to make women entrepreneurs able to use the paperless system will be useful.
- In-depth analysis of what procedural obstacles women actually face in doing business needs to be conducted. Challenges faced by women needs to be identified for gender equality and social inclusion. Based on the findings, a GESI-sensitive recommendations for an enabling business environment for women can be proposed.
- Providing trainings to women to improve their knowledge on business rules and regulations is another area that requires attention. Capacity-building on products, market information and market access conditions for better integration with foreign markets should be given priority, as in the case of the SMEs.
- Taking positive advocacy programmes for women to popularise the paperless system and to mainstream them in formal trade should also be considered.
- Adoption of an integrated and coordinated approach among the government, women entrepreneurs, and women chamber bodies is necessary to facilitate their participation in paperless trade.

4.3 Youth Entrepreneurs

According to the BBS, the current youth population in Bangladesh is about 52 million, which comprises more than 33 per cent of the total population. According to the recent Quarterly Labour Force Study, FY 2015-16, more than 20.8 million youth aged 15–29 participated in the labour force, with a number of male (13.7 million) and female (7.1 million) youth among them. Their proportion within the total labour force was 33.5 per cent. The youth labour force proportion was higher in rural areas, at 34.1 per cent, than in the urban areas, at 32.2 per cent. An estimated 18.9

million of them (91.3 percent) were employed, with large difference in numbers between male youth (at 12.7 million) and female youth (at 6.3 million). The most recent Labour Force Survey of 2013 shows that the youth (15-29) unemployment rate is 8.1 per cent, whereas the national unemployment rate is 4.3 per cent. According to a report from Bangladesh Small and Cottage Industries Corporation, till June 2010, there were 0.77 hundred thousand small industries and 6.30 hundred thousand cottage industries in Bangladesh. 70 percent of these enterprises are run by youth entrepreneurs.

Bangladesh is heading towards becoming a middle income country through attaining sustainable economic growth. To accelerate that process, active participation from these large portion of youth group in formal trade will be important. The new generation of youth is more educated, practical, self-driven, visionary, ambitious, energetic, and technology-oriented. It has a great potential to create a better society as well as foster socio-economic development of the country. Although the Government is working to provide a supportive environment for the youth, participation of the youth in formal trade still remains unsatisfactory. Despite tremendous scopes and opportunities, a number of factors prevent their greater involvement in mainstream trade.

Legal aspects and bureaucratic complexities are seen as impediments to starting young enterprises (World Bank, 2006). Like SMEs and women, young entrepreneurs also face various administrative impediments to start a new business that include businesses registration, tax administration, obtaining investment approvals and business licences, coping with copyright and patent regulations, competition law, access to work space and long-term leases, construction and building permits, Customs clearances, utility hook-ups, delaying approval, political influence, high cost of getting approval, etc. (La Porta, Shleifer & Dianlov, 2001).

Implementation of paperless trade would largely be beneficial for youth entrepreneurs. It would greatly reduce their cost of trade as well as cost of doing business. It would also reduce the number of papers required to start a business and clearance from Customs for export-import activities. It would also reduce administrative and bureaucratic complexities in starting a business by youth entrepreneurs, and thus contribute to their increased participation in formal trade.

4.3.1. National Youth Policy of Bangladesh:

Bangladesh formulated its first national youth policy in 2003, which over the years became obsolete to capture the needs and priorities of youths. Hence, it was revised through a new National Youth Policy in 2016 through a series of consultation and national-level validation meetings with relevant stakeholders. Major functions under the new national youth policy are:

- Formulating and application of special economic policy for youth (commercial policy, monetary policy and fiscal policy, etc.)
- Consider the initiatives of youth while formulating the macro-economic policies and taking agenda for Enterprise Start-ups.
- Government has set significant strategies in its National Action Plan for the improvement of the youth entrepreneurship.

- Implementation of a comprehensive sustainable industrial policy that will endorse equity for youth.
- Promote technical "know-how" of youth and improve technology appropriate for young entrepreneurs.
- Setting up special window for funding youth entrepreneurs and pre-and post-investment advising for youth entrepreneurs for credit, with necessary resources and directive to match.

4.3.2 Challenges Faced by Youth Entrepreneurs:

As mentioned in earlier sections and in previous Sections under Chapter 4, processes needed to start a fresh venture in Bangladesh is very much cumbersome and complex, which causes unnecessary delay and increase the cost of business. Business people, especially the youth group, does not like these unwanted hassles and thus feel discouraged. Planned partnership between established and new entrepreneurship is another common difficulty for a start-up company. There are also other factors that hinder the blossoming of young entrepreneurship in Bangladesh, such as:

- Traditional middle class mindset;
- Lack of knowledge-based innovation activities;
- Lack of tactical skills for growth and transformation;
- Inadequate access to finance for start-up;
- Lack of working capital;
- Lack of access to new technology and equipment;
- Lack of new product innovation and value addition;
- Bureaucratic and technical glitches in starting new businesses;
- Ineffective strategic partnership between established and new entrepreneurship;
- Absence of special policy for young entrepreneurship; and
- Improper branding and access to international trade.

Political empowerment of youths and their participation in decision-making are somehow ignored. It is inevitably the political empowerment of youths that could have a multiplying effect on ensuring good governance and building a just society.

4.3.3 Probable Entry Points:

As evident from the above discussion in this section, the rate of youth involvement in formal trade is insignificant in Bangladesh due to barriers related to cumbersome procedure to start a business, bureaucratic delay for getting relevant certificates and permissions, bulky paper requirement for Customs clearance, lack of awareness, orientation of education and training, lack of experience, fewer financial resources, limited networks, and market barriers. Implementation of paperless trade would ultimately create a better and easier space for them thereby enabling them to be involved in global trade. For that to happen for young entrepreneurs or for finding out the potential ways for inclusion of youth in international trade, it will be necessary to conduct an in-depth analysis, research work and studies, and organise awareness and capacity-building programmes. For example-

- In-depth research work should be undertaken to identify policy barriers faced by youth entrepreneurs and the scope for changes in National Youth Policy in Bangladesh;
- Identification of skills and knowledge-based capacity-building programmes, especially on advanced business management process and transformation of small entrepreneurship in line with the paperless trade process would be important;
- Identification of motivational programmes, such as roundtable discussions, and consultation meetings, with young groups is very much needed; and
- Finding out the way for political empowerment of youths through a detailed study will also be required.

Chapter Five: Conclusions and recommendations

As revealed during the Scoping Study and highlighted in the preceding chapters, transition of the trading system from a paper-based to a paperless one is a lengthy, gradual and arduous process, which requires appropriate policy support, strategies and adequate logistics. Only through active engagement of both the government agencies and the private sector, the transition and implementation process can be smoothened. Various challenges and risks standing in the way during the transformation, might hinder the speed of execution, or even threaten to derail it all together. The Scoping Study sheds light on all these dynamics that the implementation of paperless system may come across. In addition, an Action Plan for recommended activities to be undertaken is attached as **Appendix 1**.

- 1. The importance of replacing the paper-based system by a paperless one has caught up international attention, which is discernable from the measures incorporated under different articles of the WTO TFA and the UNESCAP Cross-Border Paperless Trade Framework Agreement. Through the perception analysis, it was found out that the Government has already taken several initiatives for digitisation and automation of different government agencies to fulfill the requirements to implement the TFA and UN-ESCAP Framework Agreement. However, many of the rules, regulations, Acts and policies of the Government are not in line with them, and still endorse the traditional paper-based system. They are likely to throw in challenges for the transformation process. The Scoping Study underlines the need for extensive research on identifying the gaps embedded in some of the existing policies not commensurate with the paperless trade system, and suggest necessary policy reforms in specific areas to make those complementary, rather than contradictory, or even contrary, to the paperless trade system.
 - 1.1. An in-depth analysis is necessary for identifying specific policy gaps needing reform. Concrete policy adjustments, based on the evaluation, should be suggested. A legalinstitutional foundation could be developed through this.
- 2. Transition to the paperless system, and ensuring its efficient use, involves a significant level of cost and efforts for both the Government and its border agencies as well as to the private sector. If the benefits of the new paperless system cannot be passed on to all groups, and the system is not popularised through different initiatives, motivation for transition will not be there.
 - 2.1. Awareness-building and motivational programmes, i.e. seminars, workshops and symposia, are necessary for popularising paperless trade among all stakeholders. These initiatives will definitely create a support base in favour of paperless trade.
- 3. Some of the border agencies have made significant progress in terms of introducing paperless trading processes. For example, as discussed in chapter 2 (section 2.1) and 3 (section 3.1), Customs has proceeded much ahead of the OGAs. However, effective implementation of paperless trade requires equal participation of all the agencies involved. In some cases, the

OGAs are not even aware of their role in the implementation process. A thorough understanding of their capacity and preparedness in terms of implementing paperless trade is necessary to bring everyone on board. Otherwise, partial enforcement of the system would not bring any result.

- 3.1. Research and in-depth analysis on the readiness and current level of technical capacity, of the OGAs is necessary to bring positive changes in the whole system.
- 4. Co-ordination and co-operation among relevant stakeholders was found to be another critical aspect for implementing paperless trade. Many border agencies carry out their own mandate without knowing the role and status of other agencies. Especially in the case of in-country trade, different organisations have different mandates. As a result, many procedures have duplications resulting in increased time and cost to trade. Same is true for cross-border trade as well, which imposes additional challenges to trading. A mechanism must be developed to improve co-ordination among relevant stakeholders. It is always better to design policies through a nexus between the public and the private sector. Such a coordination mechanism can bridge the gap between the two and work as a catalyst. Both the sectors must be equally involved as investment from both the parties is necessary for sharing the cost of transformation. Co-ordination is also important for avoiding duplication.
 - 4.1. Through dialogues, consultations and engagement of all stakeholders, effective implementation of paperless trade is possible. Cooperation among, and equal participation of, the border agencies and the private sector trade bodies with sufficient representation of marginalised groups, namely SMEs, women and young entrepreneurs, on decision-making activities, would create such an effective coordination mechanism.
- 5. The Study identified the possible winners and losers of the reform process and the key actors involved in the system, and described their respective roles. It was seen that the Government, most of the businesses, Customs, the BSTI, the DAE, the CCI&E, etc. have positive interests in carrying out paperless trade reforms. They are among the beneficiaries, and comprise the supporters' group that would positively influence the system. However, a small group of dishonest traders, a handful of C&F agents and freight forwarders, and a handful of courier service providers might have reservations to implement the new system. All their perceptions were well noted in the Scoping Study and a positive balance of power in favour of paperless trade is found. However, there might be other dimensions to their perceptions. The negative group might have hidden authority, interests and agenda and the ability to influence the reform. All these must be considered for making effective strategies.
 - 5.1 An in-depth power analysis of positive and negative forces is necessary to design appropriate policies and advocacy programmes.
 - 5.2 Training and awareness programmes can be taken for the negative groups to bring about changes in their mindset.

5.3 An incentive mechanism must be developed for compensating the negative groups.

6. The participation of SMEs in formal trade is found to be quite un-satisfactory. They are facing many obstacles relating to procedures, finance, higher trade cost, competitiveness, etc. The Scoping Study clearly underlined the benefits the SMEs would receive from paperless trade. However, owing to some cost involvement in the transformation of automation process required for its implementation, most of the SMEs may be less enthusiastic. Thus, the SMEs would need some extra attention for easing their transformation process.

The Study also found that women and youth entrepreneurs are among the beneficiaries of the reformed system. Their businesses may see a manifold increase through the implementation of the paperless system. They would also require special attention and support so they can efficiently use the system and improve their participation in formal trade.

The idea of paperless trade must be popularised among the marginalised groups, namely SMEs, women and young entrepreneurs so they can comprehend the benefits associated with it. They should be given specialised trainings in order to enable them to cope with the changing pattern. Improving their trade knowledge and capacity should also be considered.

- 6.1. Proper incentives and compensation package should be in place to inspire the marginalised groups to improve their engagement and participation in paperless trade reforms. Some support programmes can also be undertaken so that the small businesses can bear the cost of transformation.
- 6.2. Technical trainings like online documentations, transaction, availing other ICT based services etc. should be provided to them to enable them to cope with the digital system.
- 6.3. The target groups who have the potential to perform in local and international trade should be identified, and, then, provided with necessary capacity-building programmes and technological support.
- 6.4. To start with, pilot projects may be initiated in one or two selected border areas, such as Benapole and Banglabanda, to identify practical challenges in implementing paperless trade. The pilots should have special provisions and mechanisms for the marginalised groups. The pilot projects would create opportunities of learning by doing and would offer practical experiences in the implementation of paperless trade, which may later be replicated in other ports/Land Customs Stations.
- 7. UNESCAP has identified 16 areas of reform for implementation of paperless trade, as discussed in chapter 2. Many of those reforms require negotiations with trade partners for harmonised business procedures, acceptance of documents and standards and, most importantly, for exchange of information opening negotiations with the most likely partners in this regard should be undertaken in right earnest.

- 7.1. Mutual recognition of standards and harmonisation of trade procedures among trade partners is necessary for successful implementation of cross-border paperless trade. Thus bi-lateral, regional and multilateral co-operation with partner countries for acceptance of documents and exchange of data is necessary.
- 8. Paperless trade will have a huge impact in breaking the corruption chain at the local level as well. The role of **Competition Commission** cannot be underestimated in this regard. It can ensure welfare for both consumer and businesses by maintaining a fair and undistorted trade and business environment. It can play a vital role in monitoring the application of legislative foundation developed for paperless trade implementation.
 - 8.1. A detailed study is necessary on how to strengthen the capacity of Competition Commission in order to create and sustain fair competition on Business and Trade in Bangladesh.
- 9. In order to facilitate the implementation of the system and sustain the transformation, critical analysis of associated risks both at the micro and macro levels is necessary. Technical issues of cyber security, secured payment mechanism, use of appropriate technology etc. must be kept in mind while designing strategies and policies for implementing paperless trade. It should also be considered that for a developing country like Bangladesh, an e-based system would have many other risks associated with effective implementation. Necessary precautionary measures need to be taken to prevent cyber-crime, and the system of digital signature need to be introduced.
 - 9.1. Considering the ICT-related risks and ensuring digital security while designing paperless implementation strategies will significantly improve the chance of success. Security measures should be given a priority in implementation of the paperless trade.
 - 9.2. Adoption of the principle of functional equivalence will enable electronic signature instead of the handwritten one.
- 10. The Government has strong political commitment in implementing paperless trade, which was evidenced from the ratification of the WTO TFA and the active consideration towards endorsing the UNESCAP Framework Agreement. However, there is also a political culture in the country that in case of change in government, projects undertaken by previous governments are often discontinued. These create risks in implementation and affect the sustainability of reform processes.
 - 10.1. Consultation meetings and dialogues programmes among political parties, civil societies, researchers, academicians, NGOs, INGOs and other relevant stakeholders should be organised to make paperless trade initiatives sustainable.

References:

Aniszewski, Stefan. (2010). "Coordinated Border Management – A concept paper", *WCO Research Paper*, no. 2.

Bangladesh Bank, (2013). Of changes and transformations (Bangladesh Bank July 2009-June 2013).

BBS, (2005). Economic Census 2001 and 2003, National Report.

BBS, (2010). Report on Bangladesh Survey of Manufacturing Industries (SMI) 2005-2006.

BBS, (2011). Report of the Labor Force Survey 2010.

BBS, (2014). Report of the Labor Force Survey 2013.

BBS, (2013a). Preliminary Report on Economic Census 2013.

BBS, (2013b). Survey of Manufacturing Industries-2012.

BBS, (2012). Gender Statistics-2014.

BBS, (2016). Quarterly Labour Force Study 2015-16.

Canadian International Development Agency. (2013). *Gender Equality And Trade-Related Capacity Building: A Resource Tool For Practitioners*, Quebec.

Djankov, S., La Porta, R., Lopez de Silanes, F., and Sbleifer, A. (2001). *The Regulation of Entry*, Policy Research Working Paper, WPS 2661, August, 2001, USA.

Duval. Y. and Utoktham C. (2014). "Enabling Participation of SMEs in International Trade and Production Networks: Trade Facilitation, Trade Finance and Communication Technology", *ARTNeT Working Paper Series*, No. 146, June, 2014.

Ha, S. H. & Lim, S. W. (2014). "Progress of Paperless Trade in Asia and the Pacific: Enabling International Supply Chain Integration", *ADB Working Paper Series on Regional Economic Integration*, No. 137, October 2014.

INSPIRED (2013). The state of the SME sector – the manufacturing SME sector in Bangladesh, *Working Paper # 3*.

Islam. S. (02 Feb, 2015). Checking capital flight tax evasion: BB, NBR Start executing electronic LCs. *The Financial Express*, Dhaka.

Jain, Sandeep Raj. (2012). "Coordinated border management: the experience of Asia and the Pacific Region", *World Customs Journal*, vol. 6, no. 1, March.

Laryea, E. (2002). : Paperless Trade: Opportunities, Challenges and Solutions.

The Daily Star, (2015). "Potential of Small and Medium Enterprises", 11 March, 2015, Dhaka.

The Asia Foundation, (2011). Where are Bangladesh's Businesswomen? available at <u>http://asiafoundation.org/2011/06/08/where-are-bangladeshs-businesswomen/</u>

The Financial Express, (2017). "Cross border paperless trade deal to benefit Bangladesh", 21 April, Dhaka.

The Manusher Jonno Foundation, (2016). Women and the Right of Access to Information in Bangladesh, May, 2016, Dhaka.

T. Yasui & M. Engman, (n.d.). (2013). "The Role of Automation in Trade Facilitation" in Schefer, (2013). Poverty and the International Economic Legal System: Duties to the World's Poor, Cambridge University Press.

Polner, Mariya. (2011). "Coordinated border management: from theory to practice", *World Customs Journal*, vol. 5, no. 2, September.

United Nations Conference on Trade & Development (UNCTAD). (2005). "Paperless Trade", accessed at - <u>http://www.gfptt.org/node/46</u>

United Nations Economic Commission for Europe (UNECE). (2006). *A Roadmap towards Paperless Trade*, United Nations, New York & Geneva.

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). (2013). "Trade Facilitation and Paperless Trade in Asia: Results from an Expert Survey", *Staff Working Paper 01/13*, United Nations, New York & Geneva.

UNESCAP. (2014). *Estimating the Benefits of Cross-Border Paperless Trade*, United Nations, New York & Geneva.

UNESCAP. (2016a). *The Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific*, United Nations, New York & Geneva.

UNESCAP. (2016b). Frequently Asked Questions (FAQs) on the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific, available at http://www.unescap.org/sites/default/files/FAQ%20on%20the%20Framework%20Agreement_N ov%202016.pdf

United Nations Economic Commission for Europe (UNECE). (2006). *A Roadmap towards Paperless Trade*, United Nations, New York & Geneva.

UNNExT. (2010). "Towards a Single Window Trading Environment: Best Practice Cases in Single Window Implementation: Case of Singapore's TradeNet", available at - <u>http://www.unescap.org/tid/UNNExT/pub/brief2.pdf</u>.

UNNExT. (2011). "Towards a Single Window Trading Environment: Japan's Development of a Single Window: Case of NACCS", available at http://www.unescap.org/tid/UNNExT/pub/brief6.pdf.

World Bank. (2006). Doing Business in 2006, available at http://www.doingbusiness.org/~/media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB06-FullReport.pdf

World Bank. (2014a). *Bangladesh Time Release Study Benapole*, July 2014, conducted for the Government of Bangladesh.

World Bank. (2014b). "Bangladesh Time Release Study Custom House Chittagong and Chittagong Port", July 2014, conducted for the Government of Bangladesh.

World Trade Organisation (WTO). (2013). The Trade Facilitation Agreement, WTO, Geneva.

Yusuf, M. A. (2015). *Institutional Capacity Assessment Report*, USAID-BTFA, April 2015, Dhaka.

Sl.	Type of Activity	Detailed Activities	Expected Results
<u>No.</u> 1.	Research Works on Inclusion of SMEs	 Areas of Research: Current Status/ Position of the SMEs; Challenges faced by the SMEs; Mainstreaming SMEs in Paperless Trade; Simplifying Business Procedures for the SMEs. 	Mapping of the situation of SMEs are conducted. Roadmap for inclusion of SMEs in the mainstream trade is designed. Simplification of business procedures for them are suggested.
2.	Research Works on Inclusion of Women/Youth Entrepreneurs	 Areas of Research: Current Status /Position of Women/Youth Entrepreneurs; Challenges faced by the Women/Youth Entrepreneurs; Mainstreaming Women/Youth Entrepreneurs in Paperless Trade. 	 Mapping of the situation of Women and Young entrepreneurs are conducted. Roadmap for inclusion of Women and Young entrepreneurs in the mainstream trade is designed. Simplification of business procedures are suggested.
3.	Research Works for Enabling Implementation of Paperless Trade in OGAs	 Identification of Gaps related to areas of paperless trade reforms in Policies Capacities Providing appropriate recommendations. 	Policy gaps are identified and reforms are suggested. Capacity-building measures are suggested.

Appendix 1: Action Plan under the PROKAS Programme

4.	Analysis of the power of Positive and Negative Forces related to Paperless Trade Reforms	 Detailed analysis of Positive forces identified in the scoping study; Detailed analysis of Negative forces/affected groups identified in the scoping study; Identification of possible risks in implementing paperless trade reforms; Identification of affected groups, who may be motivated through special programmes. Suggestions of the measures to ensure participation of both the groups in paperless trade reforms Identification of incentive mechanisms Identification of appropriate Advocacy and Training Programmes 	Balance of power is analysed and risks are identified and measures are suggested for motivation and change of perception.
5.	Advocacy and Training Programmes for Marginalised Groups	 Advocacy Programme for Marginalised Groups: Awareness programme on paperless trade, its benefits and trade agencies involved. Technical training for marginalised groups on Paper requirement for business; Business and trade procedures; Electronic trade transaction mechanism; Business network and market access information; Access to finance; How to avail themselves of ICT-based services; Awareness on possible risks associated; Areas where Reforms are needed. 	Participation of marginalised groups in trade is improved.

6.	Advocacy Programme for	• Workshop/ Training programmes on paperless	Awareness of all OGAs are ensured and
	Other Government Agencies (OGAs) ²¹	 trade Trade Facilitation Agreement; Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific; Major Trade Laws (Customs Act, VAT Act, The Companies Act, Export Policy, Import Policy Order Etc.); Areas where Reforms are needed. Workshop for Intra-and inter-agency coordination. Training on Use of Risk assessment in trade processes 	improved.
7.	Advocacy/ Training Programmes on Ensuring Security of Paperless Trade	• Awareness programme (Seminars, Roundtable Discussions) on Cyber Security and implementation of Digital Signature.	Cyber-security-related risks are minimised.
8.	Dialogue/Roundtable Discussions involving all actors and non-actors (Political parties, civil society, NGOs, Think-tanks, medias etc.)	 Benefits of paperless trade; Implementation challenges; Role of actors and non-actors; Way forward. 	All actors and non-actors are involved in the process of implementation, and sustainability of the implementation.

 $^{^{21}\;}$ CCI&E, RJSC, DAE, Competition Commission, BSTI, DGDA, BB. Port Authority etc.

9.	Pilot Programmes	Pilot Programme in selected border areas to find out the practical situations/procedures faced by the traders, especially the marginaised groups, namely SMEs, Women and Youth Entrepreneurs in cross- border trade.	Actual Scenarios are identified. Remedial measures are taken for mainstream traders to remain on course with paperless trade.
		To Suggest measures to encourage marginalised groups to participate more actively in cross-border trade.	Marginalised groups are motivated to participate in mainstream international trade.
		Probable Border areas for Pilot Programmes:BenapoleBanglabandha	