

V. THE IMPACT OF INFORMATION TECHONOLOVY IN TRADE FACILITATION ON SMALL AND MEDIUM-SIZED ENTERPRISES IN BANGLADESH

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Introduction

In Bangladesh, SMEs¹ are very important players in the economy. About 90 per cent of all industrial units in Bangladesh are SMEs, which generate some 25 per cent of the gross domestic product (GDP), employ about 31 million people and provide 75 per cent of household income. There is no denying that SMEs act as the driver of the economy and are very important for national economic and social development. They serve as employers creating new jobs and providers of products for daily needs. They also act as stewards over employees and the community. However, SMEs in developing and least developed countries face considerable barriers in running their businesses and are often constrained financially and technologically. This includes inadequate and/or complex sets of policies by the respective governments. Such impediments largely contribute to the under-involvement of SMEs in international markets. This is where the nature and extent of SME participation in the global trading system needs to be highlighted. Trade facilitation is thus a crucial factor in providing SMEs with access to global markets.

Trade facilitation is a diversified concept and incorporates a wide range of issues related to regulating and conducting international trade, including supply-chain management. The study presented in this chapter focuses specifically on one particular aspect of trade facilitation in the context of Bangladesh, i.e., the impact of information technology in trade facilitation on SMEs. It is therefore hoped that the policy recommendations proposed by this study will be useful in furthering the cause of SME internationalization in Bangladesh.

Following a literature review, section A considers the issues and concerns related to SME participation in the economic development of Bangladesh. Section B discusses the evolution in the use of IT in trade facilitation in Bangladesh. Section C presents an overview of the Chittagong Customs House (CCH) automation procedure. An analysis of the survey findings with regard to SME internationalization in Bangladesh is presented in section D. Based on the discussions and analyses presented in these sections, a set of policy recommendations and concluding remarks are proposed in section E.

Both primary and secondary methods of data collection were used during the study. The primary method included a questionnaire-based survey of primary stakeholders in the private sector, which was conducted from 2 to 11 November 2008. The survey

¹ The definition of SMEs in Bangladesh used for this study is the one provided by the Bangladesh Bank in May, 2008 (annex table 1)

respondents included customs agents and representatives from the SME sector. In addition, interviews and focus-group discussions were conducted to elicit wider views on the focus of the study. Information was also collected from operators of the relevant automation system with regard to access and use of IT as well as other measures in place, to ensure that they did not unnecessarily (directly or indirectly) discriminate against particular groups of traders (e.g., SMEs).

The secondary data collection method focused on an extensive literature review covering, among other aspects, relevant national-level studies and reports. Websites of relevant organizations were examined analytically. In addition, newspapers, conference proceedings, working papers and other sources of information were also explored in depth.

With regard to analysing the state of trade facilitation in Bangladesh and the cost implications for implementation of various trade facilitation measures, while Bhattacharya and Hossain (2006) reported that the complex nature of documentation, the lengthy time taken in releasing and clearing goods from ports, and corruption among customs personnel were the major hurdles in operating a business in Bangladesh. The study further showed that a lack of automated customs procedures was a major impediment to the business community in the context of trading across borders.

In this context, Prasad (2007) mentioned that trade facilitation initiatives had significant positive impacts on the private sector by increasing the volume of its exports and imports as well as through helping exporters find new markets. In addition, the Organisation for Economic Co-operation and Development (OECD) (2005a) noted that improved and simplified customs procedures had resulted in a significant positive impact on trade flows. Similar concerns for export-oriented industries, particularly SMEs, were raised by Ahmed (2002) and Hossain (1998). In addition, SMEs in Bangladesh have received disproportionately smaller support from the Government in terms of policy and fiscal incentives, although there have been improvements in the sanctioning and other administrative procedures affecting development of SMEs (Hossain, 1998).

A global survey on "Removing barriers to SME access to international markets" by OECD/Asia-Pacific Economic Cooperation (APEC) identified a range of barriers that were detrimental to the access by SMEs to international markets. Based on the survey results, Lester and Terry (2008) summarized four barriers that were the most serious impediments to SME access to international markets: (a) a shortage of working capital for financing exports; (b) identifying foreign business opportunities; (c) limited availability of information related to locating/analysing markets; and (d) inability to contact potential overseas customers.

Wilson (2007) estimated that all countries could benefit from more efficient customs and administrative procedures, with the greatest benefits accruing to those countries with the least efficient customs and administrative procedures. Wilson, Mann and Otsuki (2004) found a significant positive relationship between trade flow and port efficiency, customs environment, regulatory environment and service sector infrastructure. They estimated that global trade in manufactured goods could gain as much as US\$ 377 billion

from improvements in trade facilitation measures. Similarly, OECD (2003) found that a 1 per cent reduction in trade transaction costs for goods trade would bring annual gains of about US\$ 40 billion on a global basis. Most of these gains would benefit developing countries in relative terms. Duval (2006) also concluded that the long-term benefits of trade facilitation would greatly exceed the perceived implementation costs for all measures considered.

Schware and Kimberley (1995) focused on worldwide experience and identification of factors that make way for trade facilitation through the successful application of IT. Their study found that accessible information and communication technology could significantly improve trade performance. However, this technology must be accompanied by simplification of documentation, re-engineering of procedures, appropriate training and availability of local expertise, and a reliable and cost-effective communications infrastructure. Duval (2006) stated a similar opinion when emphasizing the establishment of an IT-based single window system and a modern risk-management system for ensuring higher gains from trade facilitation.

A. SMEs in Bangladesh: An overview of the current situation

The Government of Bangladesh established a National Taskforce on SME Development in 2003 with a mandate to draw up a realistic strategy for promoting rapid growth and vigorous competitiveness among SMEs in Bangladesh aimed at accelerating economic growth and reducing poverty in the country. One of the major recommendations of the taskforce was to establish an SME Foundation as a pivotal platform for the delivery of all planning, developmental financing, awareness-raising, evaluation and advocacy services in the SME sector (Ministry of Industries, 2005). Accordingly, the SME Foundation was launched in July 2007. The institution has recently become a member of the International Network for SMEs.

Integration into the global economy and the relatively fast pace of trade liberalization has posed some new challenges for the Bangladesh economy, particularly among SMEs. These firms face tough competition in the domestic market because of competition from imported goods. They also face difficulties in exporting because of weaknesses in attaining the high quality standards set by importing countries as well as compliance with sanitary and phytosanitary requirements.

One of the major constraints in the context of SME development in Bangladesh is the failure of such businesses to connect with the global market. It should be noted that even the "dollar shop" market in the United States is worth about US\$ 40 billion annually, about 60 per cent of which is currently accounted for by imports from China. Bangladesh's failure to exploit these formidable global market opportunities underscores the weak trade facilitation measures that inhibit the growth, functioning and export potential of SMEs.

Successive Governments in Bangladesh have indeed taken some trade facilitation-related measures that were expected to benefit SMEs. Studies on trade facilitation (Cai and Geddes, 2003, and Bhattacharya and Hossain, 2006) have identified several areas

where major improvements are required in this context. However, it is known that SMEs have inherent problems, and general trade facilitation measures often do not cater to their particular needs. While some trade facilitation measures have indeed helped reduce the time required for customs clearance at the ports, SMEs continue to suffer when they try to access the global market. Studies by Ahmed (2001), the Bangladesh Enterprise Institute (2004) and Moazzem (2006) identified some major impediments inhibiting the development of the SME sector in Bangladesh, including: (a) inadequate investment; (b) a lack of access to appropriate technology; (c) inability to gain access to supplies of required raw materials; (d) protected customs clearance; (e) a lack of financial facilitation and infrastructural facilities; and (f) a lack of skills upgrading. Given the SME sector scenario, designing trade facilitation measures has become an issue of heightened urgency in the Bangladesh context.

It should be noted that Bangladesh is a member of a number of Regional Trade Agreements (RTAs) such as the South Asian Free Trade Area (SAFTA), the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation and the Asia-Pacific Trade Agreement, which provide markets for many products. However, Bangladesh SMEs have not yet been able to enter those markets to a significant degree.

1. Contribution by SMEs to the Bangladesh economy

In recent years, Bangladesh has been making every possible effort, at an increasingly fast pace, to become integrated with the global economy. This has been mainly underwritten by trade reforms implemented in the recent past. Currently, the economy of Bangladesh is relatively more trade dependent compared to its aid dependence during the 1980s. Trade-related activities contribute a substantial amount to the overall economic performance of the country. As figure 1 shows, the value of exports from Bangladesh was more than US\$ 14 billion in 2007/08, which represents a remarkable growth of 720 per cent when compared with that of 1990/91. The corresponding growth figures for imports and total trade were 482.3 per cent and 561 per cent, respectively. This clearly shows Bangladesh's degree of openness, which currently stands at 43.4 per cent.

Although SMEs constitute more than 90 per cent of all industrial units in Bangladesh, any viable quantitative assessment with regard to their share in the country's economy is significantly hindered by a lack of comprehensive statistical information about these industries at the national level (Ahmed, undated). However, available information shows that 3,869 new SME units were established and 94,000 new employment opportunities generated between 2002 and 2006.

With regard to the contribution by SMEs to Bangladesh's export earnings, the latest available data show that they accounted for some 11.3 per cent of total export earnings during 2004/05 (table 1). This figure also corroborates government statistics that indicate the SME contribution to national exports varies between 12 per cent and 40 per cent in different industries (Planning Commission, 2008). Nevertheless, it must be

² Degree of openness = exports + imports as a percentage of GDP.

40 35 30 -25 US\$ billion 20 15 10 5 FY1981 FY1991 FY2001 FY2005 FY2006 FY2007 FY2008 Exports ■ Imports Total trade

Figure 1. Composition of Bangladesh's external sector performance

Source: Centre for Policy Dialogue, Trade Database.

Table 1. Share of SMEs in export earnings of Bangladesh, 2004/05

Sectoral distribution of enterprises	Sectoral exports (US\$ million)	Exports by SMEs (US\$ million)	Share of SMEs in sectoral exports (%)
Woven garments	3 598	450	12.5
Knitwear	2 819	352	12.5
Leather	221	94	42.5
Jute goods	307	12	3.9
Fertilizer and chemical products	197	0	0
Footwear	88	44	50
Ceramic products	29	0	0
Engineering goods	85	20	23.5
Petroleum by-products	35	0	0
Handicrafts	5	5	100
Others	621	n.a.	n.a.
Total exports	8 652	977	11.3

Source: M.A. Miah, 2006.

emphasized that a comprehensive study of sectoral performance by SMEs in the Bangladesh economy, particularly in trade, has yet to be carried out.

The contribution of small-scale industries to GDP in Bangladesh has been on the rise in recent years. While it was Tk 7,609 crore³ (US\$ 1.1 billion⁴) in 1996/97, the figure in 2006/07 stood at Tk 14,944 crore (US\$ 2.2 billion). The share of small-scale industries in GDP was 4.53 per cent in 1996/97, rising to 5.11 per cent in 2006/07 (figure 2).

20 18 16 14 12 10 Per 8 6 4 2 1997-1999 2000-2002 2003-2005 2006-2008 ■ Small-scale ■ Large and medium-scale □ Total

Figure 2. Manufacturing SMEs' sectoral share of GDP at constant 1995/96 prices

Source: Ministry of Finance, 2009.

A survey conducted by ICG/MIDAS in 2003/04 indicated that 51 per cent of the contribution by SMEs to GDP was accounted for by small-scale enterprises that had an average labour force size of 2-5 employees. SMEs with 51-100 employees were at the bottom of the list in terms of contributing to GDP. The survey further highlighted the fact that manufacturing and agriculture were the major sectors, contributing 38 per cent and 24 per cent, respectively, to GDP.

As the above discussion indicates, the role of SMEs in the overall economic development in Bangladesh is significant. However, studies have shown that these highly potential enterprises (with an average of some 12 per cent share in export earnings) face a number of obstacles in their efforts to participate in the international trading system. A recent Centre for Policy Dialogue study highlighted the top 10 priority areas for the private sector in Bangladesh in this regard (table 2).

³ Crore = 10 million.

⁴ US\$1 = Tk 69.06.

Table 2. Top 10 priority areas in trade facilitation

Issues

- 1. Reduction and simplification of documentation requirements.
- 2. Elimination of bribery and other corrupt practices of customs personnel.
- 3. Establishment of a single window for one-time submission.
- Harmonization/standardization of documentation requirements, based on international standards.
- 5. Independent appeal mechanism for traders.
- 6. Improvements in customs inspection and control procedures.
- 7. Computerization and automation of trade procedures.
- 8. Timely and comprehensive publication and dissemination of trade rules and regulations.
- 9. Completing clearance of goods before they have arrived physically in the customs territory.
- 10. Establishment of enquiry points and/or call centres.

Source: Bhattacharya and Hossain, 2006.

With the existing level of automation as well as future initiatives, it remains to be seen how far these concerns of the business community will be addressed by policymakers.

2. Bangladesh in international trade: Current concerns for SMEs

While the developed countries were the first to be affected by the current global recession from the second half of 2007, the emerging and developing economies gradually started experiencing the effects from the second quarter of 2008. As for Bangladesh, the economic situation started to change in mid-2008. This is clear from a month-on-month picture of Bangladesh's export growth for 2008/09 compared with 2007/08 (figure 3). Export performance of both primary and manufactured goods began to decline in July 2008. Although export growth of primary goods subsequently started to pick up, overall export growth continued to decline during January-April 2009.

On the other hand, some signs of relief are visible in a quarter-on-quarter growth for 2008/09. Total export growth figures for the first three quarters of 2008/09 were 42.5 per cent, -1.6 per cent and 6.5 per cent, respectively (table 3). With regard to growth performance during the first 10 months of 2008/09, compared with the same period of 2007/08, total exports registered growth of about 12.8 per cent. This was largely made possible by the robustness of the ready-made garment sector, which continued to register growth throughout 2008/09.⁵ Nonetheless, sluggish demand in recent times in the United States and European Union markets, which account for about 90 per cent of Bangladesh's apparel exports (77.3 per cent of total exports), does not augur well for Bangladesh.

⁵ The significance of the ready-made garment sector is also paramount, given the fact that it is the single largest export revenue generator.

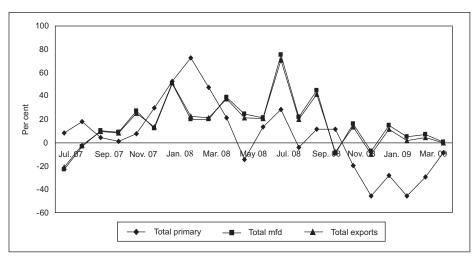


Figure 3. Decline in Bangladesh exports, July 2007 to March 2009

Source: Centre for Policy Dialogue Trade Database.

Table 3. Quarterly export growth of Bangladesh's major commodities, 2008/09 versus 2007/08

Commodities	Q1	Q2	Q3	April	July-April
Ready-made garments	44.64	5.41	12.72	2.62	18.13
Non-ready-made garments	35.71	-22.23	-14.29	-14.47	-3.76
Raw jute and jute goods	-11.49	-18.87	-25.28	-10.74	-17.74
Leather	-6.34	-50.24	-41.57	-49.98	-36.13
Frozen food	15.69	-24.31	-32.48	-26.91	-14.26
Ceramic goods	22.28	-22.65	-29.39	-17.73	-10.69
Others	62.42	-17.61	-4.33	-8.54	6.99
Total exports	42.45	-1.60	6.50	-2.30	12.76

Source: Centre for Policy Dialogue Trade Database.

However, other major export items such as raw jute and jute goods, leather and frozen food experienced a steady fall during the second and third quarters of 2008/09 when compared with the same quarters of the previous fiscal year (table 3). A similar situation prevailed from July 2008 to April 2009 when exports of all three of these major commodities suffered from significant negative growth compared with the corresponding period in 2007/08.

As noted above, about 90 per cent of all industrial units in Bangladesh are SMEs. The important sectors such as ready-made garments, raw jute and jute goods, and frozen

foods include a large number of SMEs. Therefore, any negative developments in terms of declining export growth for these sectors are likely to create more space for policymakers to adopt new strategies for helping these businesses survive in the face of global economic turmoil.

3. Stimulus package announced by the Government of Bangladesh

In April 2009, the Government of Bangladesh announced the first stimulus package to combat the effects of the global financial crisis. The underlying objective of this stimulus package was to safeguard Bangladesh's domestic economy from the negative impacts of the global recession by maintaining robust export growth, buoyancy in revenue earnings from imports and resilience in remittance earnings. The special package, worth of Tk 34.2 billion (US\$ 495.22 million, or 0.55 per cent of 2008/09 GDP), was allocated to supporting domestic and export-oriented industries and agriculture, the generation of electricity and the provision of social protection for workers. As part of this support, seriously affected industries such as jute goods, leather and leather products, frozen foods and shrimp were selected for additional support (2.5 per cent in addition to existing support); other sectors (such as backward linkage textiles, bicycles, light engineering products and agro-processing) that are already receiving cash incentives will continue to get this financial support.

In addition, the Government announced several types of policy support for export-oriented industries in the form of timely disbursements of cash incentives, an increase in allocations under the export development fund, the expansion of export credit to all sectors at a reduced rate (7 per cent), and rationing support for garment workers. The Government also introduced a special financing scheme under investment promotion and financing facilities worth Tk 400 crore (US\$ 57.9 million), an SME fund of Tk 600 crore (US\$ 86.9 million), a house-building fund of Tk 500 crore (US\$ 72.4 million), and an Equity and Entrepreneurship Fund of Tk 300 crore (US\$ 43.4 million).

In June, 2009, under the national budget for 2009/10, another stimulus package totalling Tk 50 billion (US\$ 724 million) was announced.⁶ It would appear that disbursement of this fund for 2009/10 will be based on the guidelines mentioned in the stimulus package of the previous year (2008/09). This support was expected to contribute towards boosting domestic industries and to keeping the business of export-oriented industries running in view of the falling prices of export products. In addition, a number of projects related to small-scale and cottage industries were included in the Annual Development Programme for 2009/2010, but without any allocation.⁷

⁶ Budget speech by the Finance Minister on 11 June 2009.

⁷ These projects include, among others, the establishment of a garments industrial park, the expansion of BSCIC industrial estates, the reconstruction of two BSCIC estates, support for people affected by small-scale and cottage industries, the development of *benarosy palli* (industrial plots for small cottage industries manufacturing traditional silk saris known as *benarasi*), a BSCIC plastics estate, a BSCIC automobile estate, the expansion of three BSCIC estates and an industrial park.

It is worth noting that while the automation of trade procedures is a prerequisite for faster and secured trade, the initial and perhaps most important task is to eliminate both domestic and external barriers that negatively effect trade growth. Therefore, measures to ensure the positive impact of IT in trade facilitation will only achieve their objectives when the business community feels safer and encouraged by the Government's trade enhancement policies.

B. Evolution of information technology use in trade facilitation in Bangladesh

In recent years, the idea of trade facilitation has expanded to include the modernization and automation of import procedures in order to make the adoption of international standards easier. It is generally understood that trade facilitation involves the reduction of transaction costs for all parties in the enforcement, regulation and administration of trade policies. Trade facilitation has been described as the "plumbing" of international trade (Hoekman and others, 2002) that focuses on the efficient implementation of trade rules and regulations.

By nature, trade facilitation is very technical and detailed, with the underlying objective of reducing various forms of non-tariff barriers that impose a significant loss of time and costs in conducting trade, including an excessive number of documents, involvement of dozens of agencies, and complexity in data reporting and processing. It is in this context that the simplification of customs procedures is of great importance for Bangladesh.

It is not only the number of documents required for export and import clearance (table 4) that is higher in Bangladesh (28 and 32 documents, respectively) when compared with India (17 and 20) as well as other top performers such as Sweden (8 and 6) and Singapore (5 and 3), but also the overall cost that makes the whole procedure more complex. Such performance indicators clearly underscore the need for speedy measures to expedite trade facilitation initiatives in Bangladesh in order to ensure better integration into the global economy.

It was recognition of such trade obstructive procedures that prompted the Government of Bangladesh to initiate various customs automation projects in the early 1990s (table 5). The original version of ASYCUDA⁸ was introduced in Dhaka and Chittagong between 1992 and 1996. The ASYCUDA++ project was designed to introduce the updated system at five customs stations: Kamalapur Inland Container Depot (ICD); Dhaka; Chittagong; Benapole; and Mongla. (A list of all customs stations in Bangladesh is presented in the box below and in figure 1 of annex I).

The system was installed by an eight-member national team from the Customs Administration in coordination with an international consultant, Clapp and Mayne Inc. of

⁸ ASYCUDA is an electronic data system that allows the random selection of consignments and staff for inspection purposes, in order to reduce the opportunity for bribes.

Table 4. Comparative picture of cross-border trading by Bangladesh

		Durati	on (days)			Cost (US	S dollars)	
Indicators	Bangladesh	India	Sweden	Singapore	Bangladesh	India	Sweden	Singapore
			Nat	ure of expo	rt procedure	s		
Document preparation	14	8	2	1	290	350	116	105
Customs clearance and technical control	6	2	1	1	120	120	41	31
Ports and terminal handling	5	3	1	1	420	175	190	180
Inland transportation and handling	3	4	4	2	140	300	350	140
Total for all	28	17	8	5	970	945	697	456
			Nat	ure of impo	rt procedure	s		
Documents preparation	22	8	2	1	455	390	154	88
Customs clearance and technical control	4	4	1	1	135	120	41	31
Ports and terminal handling	4	6	2	1	585	200	190	180
Inland transportation and handling	2	3	1	0	200	250	350	140
Total for all	32	20	6	3	1 375	960	735	439

Source: World Bank Doing Business Website, 2009.

Table 5. Major steps towards customs automation in Bangladesh

Year	Automation measures
1992	Introduction of ASYCUDA at the Dhaka Customs House (DCH).
1996	Introduction of ASYCUDA at Chittagong Customs House (CCH).
1999	Initiation of the Customs Administration Modernization Project-1.
2001	"ASYCUDA++ Migration Project" designed to interface the ASYCUDA++ software with the computer system at five Customs Houses in the country.
2003	Introduction of direct trader input.
2008 (Aug.)	Initial automation of CCH; operation of import general manifest (IGM) and export general manifest (EGM) launched.
2008 (Oct.)	CCH Automated; full operation started on 6 October 2008.
2008 (Oct.)	Dhaka Chambers of Commerce and Industry sign a contract with DataSoft Management Services for the automation of DCH.
2009 (May)	DCH automated; scheduled to begin full operation from July 2009.

Source: Authors' compilation from various sources.

United States of America, representing UNCTAD. The system covers most foreign trade procedures, including manifests and customs declarations, accounting procedures, risk management and warehousing procedures. It serves as a database of detailed information about foreign trade transactions, which is helpful in economic analyses and planning. An UNCTAD study observed that ASYCUDA "cannot be successfully implemented without first undertaking a major reform of customs procedures." In other words, computerization alone cannot result in more efficient customs administration.

In 1999, the Bangladesh Export Diversification Project was created with the goal of strengthening the country's economy by increasing export trade. Funding and support for the project has been provided jointly through the World Bank and the World Customs Organization (WCO). Trade facilitation initiatives in Bangladesh include WCO-sponsored experts from other Customs Administrations to provide technical assistance workshops; a team of international and local experts, coupled with National Board of Revenue staff for planning, training and the drafting of legislation; and the installation of the ASYCUDA++ system by UNCTAD for electronic data control.

Under the Bangladesh Export Diversification Project, the Customs Administration Modernization Project is funded by the World Bank in support of export diversification, which includes customs reforms, trade and tariff policy reforms, and support for companies seeking to develop export products and expand markets. The project was initiated under the purview of the Ministry of Industry and funded by the International Development Authority. The project is one of the main components of the Bangladesh Export Diversification Project and simultaneously the first step of the Revenue Administration Modernization Programme.

Customs stations in Bangladesh

Of the country's 13 land ports, Benapole port is operated by the Port Authority itself while other ports are earmarked to be operated by private operators on a build-operate-transfer basis. Currently, Sonamasjid, Teknaf and Hilli land ports are under operation on a build-operate-transfer basis while others will be started gradually.

The three international airports in Bangladesh are Zia International Airport in Dhaka, Shah Amanat International Airport in Chittagong, and Osmany International Airport in Sylhet.

The two seaports in Bangladesh are Chittagong Port in Chittagong and Mongla Port in Khulna.

The Chittagong Customs House was initially automated in August 2008 with a view to increasing revenue and checking irregularities related to exports and imports. The operation of IGM and EGM were launched under the first phase of automation as a collaborative effort between the Government and the private sector. The initial assumption was that this endeavour would help the Chittagong Customs House check evasion of tax amounting to at least Tk 350 crore (US\$ 50 million) and double the revenue earnings, which currently stand at some Tk 11,000 crore (US\$ 1.6 billion). However, the automated

system malfunctioned on the first day of implementation and could not immediately be put into full operation. Nevertheless, efforts by all the stakeholder groups culminated in the operational inauguration of the CCH Automation System on 6 October 2008. As a continuation of such proactive measures, DCH was partially automated in May 2009.

The next step is to introduce similar IT-enabled customs clearance procedures at the Kamalapur ICD, Dhaka as soon as possible. It should be noted that Datasoft, the automation software designing company, has already set up the required equipment at ICD. However, the system is awaiting necessary bureaucratic approval before it can be made operational.⁹ A detailed discussion of this automation process is presented in section C.

Customs automation in Bangladesh compared to international instruments

While significant efforts have been made by the Government to facilitate trade procedures in Bangladesh, the situation is still far from achieving the standard level as perceived by the international community. Together with other measures to facilitate trade, different instruments developed by various multilateral agreements and institutions have emphasized the issue of customs automation. Although trade facilitation appears to somewhat of a new agenda within the WTO system, it is in fact not new within the context of trade negotiations or among other international organizations. For example, the United Nations, its regional commissions and institutions as well as other specialized institutions such as WCO have been working on trade facilitation for more than half a century. Trade facilitation was very much a part of the General Agreement on Tariffs and Trade (GATT) from its inception (Wickramasinghe, 2004). However, the issue gathered momentum when brought under the mandate of negotiations in the 1996 Singapore Ministerial Meeting (Bhattacharya and Hossain, 2006). The following discussion highlights Bangladesh's position vis-à-vis WCO and WTO in terms of identifying issues of concern and the level of compliance in the context of trade facilitation.

2. Bangladesh vis-à-vis World Customs Organization trade facilitation initiatives

The WCO Revised Kyoto Convention, often referred to as the "Blueprint for Modern Customs Administration", underscores a wide range of measures and strategies for creating a development-friendly, secure international trading system. ¹⁰ Another important instrument

Informal discussion with Manjur Mahmud, Chief Operating Officer, Datasoft Systems Bangladesh Ltd.

¹⁰ The Revised Kyoto Convention, in particular, emphasizes such issues as: (a) transparency and predictability; (b) standardization and simplification of goods declarations and supporting documents; (c) "Fast Track" procedures for authorized persons with good compliance records; (d) maximum use of information technology; (e) minimum necessary control to ensure compliance; and (f) risk management (post-clearance audits, inspections in coordination with other border agencies and the "single window" concept).

is the WCO (2007) "SAFE Framework". 11 It is a guideline, based on the Revised Kyoto Convention, which was adopted by the WCO Council in June 2005, with 137 members expressing their intention to implement the Framework.

Based on the four core elements (figure 4), the WCO Framework of Standards has designed a two-way approach to secure and facilitate global trade: (a) a customs-tocustoms network arrangement; and (b) a customs-to-business partnership. Each of the two approaches underscores a number of standards aimed at ensuring expeditious and secured functioning of international trade. With a view to understanding the level of achievement of the Bangladesh Customs in terms of the WCO Framework of Standards, the following discussion presents a comparative analysis of the two approaches. Table 6 focuses on the customs-to-customs approach of the WCO Framework of Standards while table 7 looks at the customs-to-business aspect.

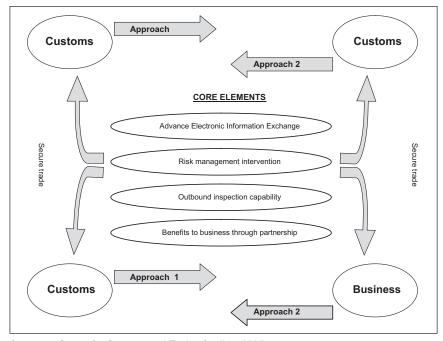


Figure 4. World Customs Organization Framework of Standards

Source: Centre for Customs and Excise Studies, 2007.

According to WCO (2007), the objectives of the SAFE Framework are: (a) establishing standards that provide supply chain security and facilitation at a global level in order to promote certainty and predictability; (b) enabling integrated supply chain management for all modes of transport; (c) enhancing the role, functions and capabilities of Bangladesh Customs to meet the challenges and opportunities of the twenty-first century; (d) strengthening cooperation between customs administrations in order to improve their capability to detect high-risk consignments; (e) strengthening customs-to-business cooperation; and (f) promoting the seamless movement of goods through secure international trade supply chains.

Table 6. Customs-to-customs approach of the World Customs
Organization Framework

Standards	Requirements	Bangladesh Customs
Integrated supply chain management	Customs administrations should follow the WCO integrated supply chain management system	Although a member of WCO, the procedures followed by Bangladesh Customs are well below the required level, owing largely to infrastructural and technological backwardness.
Cargo inspection authority	Customs administrations should have the authority to inspect all cargos originating, exiting, transiting, or being transhipped through the country	Bangladesh Customs enjoys this authority to its full extent. Various provisions of the Bangladesh Customs Act, 1969, authorize Customs Administrations to exercise such power.
Modern technology in inspection equipment	Such equipment is necessary for inspecting high-risk containers or cargo without disrupting the flow of legitimate trade	Bangladesh Customs lacks such modern equipment. Containers are still scanned by old equipment. However, a number of new scanners have recently been added.
Risk management system	Necessary for identifying potentially high-risk shipments	 Green channel: Imports are released with minimal documentation checks and no physical inspection of the goods. Yellow channel: Imports receive a full documentation check and, if necessary, can be upgraded to the red channel. At present, the majority of the shipments fall under this category. Red channel: Imports receive a full documentation check and physical inspection of the goods. At present, about 10-12 per cent of total imports fall under this category.
High-risk cargo or container	Identifying suspicious shipments	Cargo or container deemed high-risk is inspected through the red-channel procedure.

Table 6 (continued)

Standards	Requirements	Bangladesh Customs
Advanced electronic information	Necessary for risk assessment	Owing to IT inadequacy, Bangladesh Customs does not have the necessary electronic information for risk assessment apart from those provided by traders and agents through DTI.
Targeting and communication	Standard sets of targeting and screening criteria among different Customs Administrations	The level of targeting and screening performed by Bangladesh Customs is a long way behind the international standard.
Performance measures	Maintaining proper records of customs' performance	Maintenance of performance records is done at a substantial level in Bangladesh. However, there is still extensive paper work that needs to be replaced by adopting relevant IT software
Security assessment	Cooperation among various border agencies	Bangladesh Customs works in close cooperation with different government agencies including various ministries, police, coast guards, Bangladesh Atomic Energy Commission etc.
Employee integrity	Programmes should be in place to prevent lapses in employee integrity	Corruption and unethical practices among customs officials is one of the major problems with Bangladesh Customs.
Outbound security inspections	Conduct such inspections upon request from the importing country	Bangladesh Customs conducts such inspections with the limited resources.

Source: Authors' compilation from various sources.

Table 7. Customs-to-business approach of the World Customs
Organization Framework

Standards	Requirements	Bangladesh Customs
Partnership	Authorized Economic Operators (AEOs) will carry out self-assessment	Bangladesh Customs does not authorize any individual or institution with special credence to avail itself of any simplified or special procedure. All traders are treated equally. However, in some cases, traders with long-term satisfactory track records in all aspects of importing/exporting may enjoy the privilege of faster release or clearance of their goods.
Security	AEOs should incorporate predetermined security measures into their existing business practices	There is no such option. Rather, Bangladesh Customs carries out routine post-clearance audit at the premises of selected traders.
Authorization	Process to offer incentives to AEOs	No such initiatives exist.
Technology	All parties will use modern technology	Although ASYCUDA++ is available for use, its use is not optimal within Bangladesh Customs. In addition, traders only used DTI, which is also limited to registered traders. Chittagong Customs House was automated only recently. Currently, there are more than 3,000 registered users of the recently automated system. Apart from customs agents, this includes around 20-25 large-scale companies that operate through their own clearing houses.
Communication	Regular updating of customs-business partnership	Communication between Bangladesh Customs and the trading community is at the lowest level. The Customs Administration seldom invites a business for consultations or feedback on matters related to international trade.
Facilitation	Cooperation between the Customs Administration and AEOs	No such partnership exists.

Source: Authors' compilation from various sources.

3. Trade facilitation in Bangladesh in the World Trade Organization context

As an LDC, Bangladesh has been showing keen interest in developments in trade facilitation within the ambit of the Doha Development Round negotiations. However, Bangladesh has so far submitted only one proposal on an "Implementation mechanism for special and differential treatment, and technical assistance and capacity-building support to WTO with regard to its needs and requirements related to trade facilitation. Nevertheless, a recent study showed that there was optimal awareness within both the public and private sectors concerning the necessity to simplify existing cumbersome customs procedures in order to facilitate trade (Bhattacharya and Hossain, 2006).

One of the major findings of the above-mentioned study in relation to the importance of IT in customs clearance procedures was that import/export documentation requirements were excessive and time-consuming, and that manual processing created requirement for irregular and arbitrary payments to expedite the release of goods from customs stations. In addition, the urgent need to establish a "single window" has often been emphasized by the private sector in Bangladesh. As noted above, the private sector in Bangladesh has identified 10 priority areas (in the context of the WTO negotiations) that need urgent attention by the Government. Table 8 highlights the proposals submitted to WTO by member countries that are of interest to Bangladesh.

Table 8. World Trade Organization proposals on trade facilitation and priorities for Bangladesh

Bangladesh priorities	Reflected in WTO members' proposals				
Bangiauesn priorities	Relevant proposals	Major issues raised			
Reduction and simplification of documentation requirements	Symbol: (TN/TF/) W/17, W/18, W/24, W/30, W/31, W/36, W/45, W/46, W/62, W/67, W/70, W/49, W/78, W/130/Rev.1, W/121	Non-discrimination Periodic review of formalities and requirements Reduction/limitation of formalities and documentation requirements			
	Sponsors: Chile; India; Japan; Republic of Korea; Mongolia; Peru; New Zealand; Norway; Switzerland; Turkey; Hong Kong, China; Taiwan Province of China; and the European Community	 Use of international standards Uniform customs code Acceptance of commercially available information as well as copies Automation Single window/one-time submission 			

¹² The proposal, TN/TF/W/142, was submitted by the Core Group of Developing Countries (Bangladesh, Botswana, Cuba, Egypt, India, Indonesia, Jamaica, Kenya, Malaysia, Mauritius, Namibia, Nepal, Nigeria, Philippines, Rwanda, Tanzania (United Republic of), Trinidad and Tobago, Uganda, Venezuela (Bolivarian Republic of), Zambia and Zimbabwe).

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Table 8 (continued)

Bangladesh priorities	Reflected in WTO	Reflected in WTO members' proposals			
Bangiauesh phonties	Relevant proposals	Major issues raised			
		 Elimination of pre-shipment inspection Phasing out mandatory use of customs brokers 			
Elimination of bribery and other corrupt practices among customs personnel	Symbol: (TN/TF/) W/8, W/60 Sponsors: Dominican Republic; Japan; Mongolia;, Pakistan; Peru; and Taiwan Province of China	 Establishment of a Code of Conduct Computerized system to reduce/eliminate discretion System of penalties Technical assistance to create/ build up capacities to prevent and control customs offences Appointment of staff for education and training Coordination and control mechanisms 			
Establishment of a "single window" for one-time submission	Symbol: (TN/TF/) W/17, W/18, W/30, W/45, W/46, W/70, W/100 and Corr.1, W/138/Rev.2 Sponsors: Chile, Japan, Republic of Korea, Mongolia; Peru; Singapore; Taiwan Province of China; Thailand; Turkey; and the European Community	 Introduction of procedures for allowing one-time submission Acceptance of single documentary submission Single window as a clearinghouse for all documents and data submission Establishment of single window at borders or ports with efficient computer back-up Inter-agency coordination 			
Harmonization and standardization of documentation requirements, based on international standards	Symbol: (TN/TF/) W/17, W/18, W/30, W/36, W/45, W/46, W/62, W/67, W/70, W/78, W/85, W/121, W/131/Rev.1 Sponsors: Chile; European Community; India; Japan; Republic of Korea; Mongolia; New Zealand; Norway; Peru; South Africa; Switzerland; Taiwan Province of China; and Turkey	 Use of international standards as a basis for documentation and data requirements Development and adoption of common international trade requirements and procedures 			

Table 8 (continued)

Bangladesh priorities	Reflected in WTO members' proposals		
Bangiadesh priorities	Relevant proposals	Major issues raised	
Independent appeal mechanism for traders	Symbol: (TN/TF/) W/6, W/8, W/97 Sponsors: Costa Rica; European Community; Japan; Mongolia; New Zealand; Pakistan; Peru; Taiwan Province of China; and the separate customs territory of Penghu, Kinmen and Mastu	 Obligation to provide non-discriminatory, legal right of appeal against customs and other agency rulings and decisions Development of legal and administrative appeal systems for lodging objections Release of goods in the event of appeal 	
Improved customs inspection and control procedures	Symbol: (TN/TF/) W/39 Sponsors: Paraguay; Rwanda; and Switzerland	 Avoidance of inspection and controls more than once for the same shipment unless it is completely necessary Non-imposition of veterinary, medico-sanitary or phytosanitary inspection for goods in transit 	
Computerization and automation of trade procedures	Symbol: (TN/TF/) W/30, W/45 Sponsors: Peru; and Turkey	 Automation of customs and other agency import/export procedures Introduction of automated and electronic data interchange 	
Timely and comprehensive publication and dissemination of trade rules and regulations	Symbol: (TN/TF/) W/6, W/7, W/8, W/13, W/26, W/30, W/32, W/40, W/45, W/70, W/78, W/89, W/96 and add.1, W/114/Rev.1, W/115/Rev.1, W/155 Sponsors: Argentina; Chile; China; the European Community; Hong Kong, China; India; Republic of Korea; Japan; Mongolia; Norway; Pakistan; Peru; Switzerland; Taiwan Province of China; Turkey; and the United States	 Make rules and regulations available on a non-discriminatory basis Information should be widely available Publication of rules and regulations in at least one of the official WTO languages Ensuring dissemination of information through readily and promptly accessible official media 	

Table 8 (continued)

Dan aladaah uulaukkia	Reflected in WTO members' proposals			
Bangladesh priorities	Relevant proposals	Major issues raised		
Completing clearance of goods before they have arrived physically in the customs territory	Symbol: (TN/TF/) W/10, W/17, W/18, W/46, W/53, W/70 Sponsors: Chile; European Community; Japan; Republic of Korea; Mongolia; Peru; and Taiwan Province of China	Enabling importers to file entries prior to arrival of goods at the port of entry Introduction of procedures for accepting and examining documents prior to arrival of goods Commitment by members to introduce simplified customs release and clearance procedures including pre-arrival processing		
Establishment of enquiry points and/or call centres	Symbol: (TN/TF/) W/6, W/7, W/10, W/26, W/30, W/45, W/70 Sponsors: China; Chile; European Community; Japan; Mongolia; Pakistan; Peru; and Taiwan Province of China	 Establishment of enquiry points providing information on all measures and information Single national focal point as a centre for communication with other domestic competen authorities Enquiry points with competent officers 		

Source: Compiled from WTO TN/TF/106/Rev.13.

The Government of Bangladesh has been putting various measures in place in order to comply with the provisions set out in Articles V, VII and X of the General Agreement on Tariffs and Trade, 1994, particularly in the context of using IT in facilitating trade-related procedures. This includes regular updating of the Bangladesh Customs website where information such as that on customs-related statutory regulatory orders, tariffs, Customs Acts and rules, and customs valuation are provided for the business community. In addition, the recent measures taken to automate CCH and DCH are critical milestones in the context of the journey towards ensuring optimal application of IT in facilitating trade. Nevertheless, there is still a long way to go, since bringing the various government agencies into the automation network has yet to be achieved.

¹³ Articles V, VIII and X of GATT 1994 deal with, respectively, "Matters relating to transit, fees and charges connected with importation and exportation", and "Publication and availability of information".

C. Chittagong Customs House automation: An overview

Bangladesh has traditionally been dependent on its seaports for connecting to international markets. Historical trends show that more than 95 per cent of exports and around 90 per cent of imports pass through the two seaports located in Chittagong and Mongla (annex I, table 2). Of the two, Chittagong port handles the major share of inbound and outbound vessels and cargo. Between 2000/01 and 2007/08, as many as 17,349 vessels were handled at Chittagong and Mongla ports, of which 83.5 per cent were handled by Chittagong port (annex 1, table 3). In addition, it handled more than 90 per cent of the total cargo during the same period (annex I, table 4). In view of this situation, it not surprising that CCH was selected as the first customs station to be brought under the automation process.

The CCH automation project launched its full-fledged operations in early October 2008 in a bid to herald a corruption- and hassle-free era in export and import procedures. The Chittagong Chamber of Commerce and Industry sponsored the project and worked for about eight months to complete it on a build-own-operate-transfer basis. Primarily, the project has been designed to run for at least five years. In the meantime, new features are likely to be put in place in order to adapt to evolving requirements by the trading community. With a view to making this new system usable and compliant with the existing ASYCUDA++, an interface has been established between the two. The system has been overwhelmingly successful in reducing the steps involved in the customs clearance process (with regard to imports) from as many as 35 steps that existed in the pre-automation phase to just seven steps. Table 9 presents an overall picture of the levels of automation of import clearance procedures at CCH.

The overall system has been designed in such a user-friendly manner that all the relevant stakeholders are expected to be able to use it without any difficulty. An overall account of these stakeholders is presented in figure 5.

As figure 5 indicates, attempts are underway to ensure effective participation of the stakeholder groups in achieving the successful operation of the automation project. While the role of all the above-mentioned stakeholders in the supply chain management is undoubtedly of crucial importance, such roles cannot be effectively discharged unless the system itself provides adequate supportive measures in the form of submissions of declarations, electronic payments of duties and taxes, etc. Hence, the two major operational modules (i.e., the IGM and EGM module, and the Bill of Entry module) have been developed to specify the role and scope of the stakeholders in customs processing (annex I, table 5).

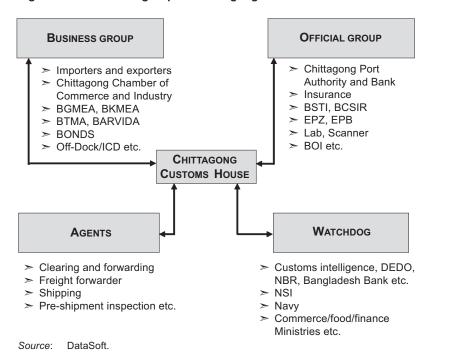
While the IGM and EGM module is aimed at enabling the relevant stakeholders to specify the arrival/departure information of consignments, it is followed by the application of the Bill of Entry module that allows clearing and forwarding agents as well as traders to lodge declarations and clear goods from the ports. An account of the links between the different groups under the CCH automation project is presented in annex 1 (tables 5 and 6, and figure 2).

Table 9. Steps in import clearance at Chittagong Customs House under the current automation system

Step	Actors involved	Level of automation
Submission of import general manifest	Career	Automated
2. Filing of Bill of Entry	Importer/CHA	Automated
Assessment of declaration	Customs	Automated (if needed, manual option can be used in customs)
4. Dues notified	Customs, importer, CHA, Port	Automated
5. Payment to bank	Importer, CHA, Bank	Manual*
6. Bank notifies receipt of duty payment	Bank, customs, importer, CFA, Port	Automated
7. Delivery from port	Customs	Physical inspection followed by electronic data recording

Source: Based on interviews with customs officials and Datasoft representatives.

Figure 5. Stakeholder groups in Chittagong Customs House automation



^{*} The system is ready for electronic fund transfers for duty payment. The Sonali Bank, Chittagong Customs House branch, has been equipped for this purpose. However, activation of the process is awaiting clearance (through a circular) from the Bangladesh Bank.

In view of the above, the initiative to automate CCH has attracted a diverse range of reactions from different segments of the stakeholder groups. The following discussion considers the major findings from the stakeholder perception survey, carried out by the Centre for Policy Dialogue, regarding the impact of information technology on trade facilitation.

D. Impact of information technology in trade facilitation on internationalization of SMEs in Bangladesh

A robust private sector is the key to attracting the private investment, entrepreneurship and technological innovation needed for sustainable economic growth. The extent of the SME contribution to the overall economic development of Bangladesh, the current state of automation of customs procedures and a detailed case study of CCH automation have been discussed above. With a view to understanding the impact of the automation initiatives, 40 traders and 40 customs agents were interviewed. At the time of the survey, all the traders were engaged in exporting and, in most cases, importing.

Before looking at the survey findings, it should be noted that the automated system at CCH is currently being utilized by more than 3,000 registered users¹⁴ in different stakeholder groups (figure 5). This includes 20-25 industries that are using the system through their own clearing houses. However, all these firms belong to the large-scale group. Available information reveals that there are no registered export-oriented SMEs in the system. Historically, SMEs have found it more convenient to use customs agents rather than handling the clearance procedures by themselves. This is due, in particular, to two factors: (a) a lack of expertise in dealing with customs, and (b) a lack of adequate resources to be devoted to such additional tasks.

Although the large-scale industries appear to be in a better position than the SMEs in terms of benefiting from automation, it should be recognized that such discrimination is due to the traders' institutional capacity and not to any weakness of the system. Nevertheless, as soon as agents lodge the documents on behalf of importers or exporters, the latter are able to view the status of the application online simply by using the file number. It is not mandatory to be a registered user for this purpose.

1. Respondents' profile

As stated above, 40 industries were covered by the survey. This included 35 ready-made garment manufacturers, 3 pharmaceutical firms and 2 frozen food traders. Another survey was conducted on an equal number of customs agents, who served 661 clients, of which 386 (about 58 per cent) belonged to the SME group (figure 6).

¹⁴ Informal discussion with Manjur Mahmud, Chief Operating Officer, DataSoft Systems Bangladesh Ltd.

Almost all the export-oriented firms, including SMEs, avail themselves of the services of customs agents for export and import clearance, ¹⁵ irrespective of their nature of business (e.g., ready-made garments, frozen foods, leather, and jute and jute goods) or geographical location (whether in Chittagong, Dhaka or Khulna). Therefore, the importance of trade facilitation measures cannot be ignored in the internationalization of SMEs.

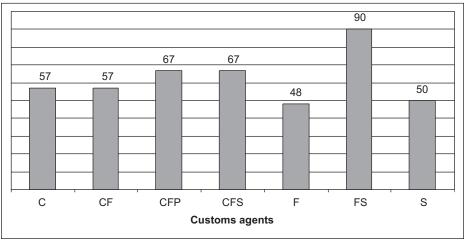


Figure 6. SMEs as a percentage of total clients

Source: Centre for Policy Dialogue-ARTNeT Perception Survey, 2008.

Note: C = Clearing and forwarding agents, F = freight forwarders, P = packers and consolidators,

S = shipping agents.

Almost all the export-oriented firms, including SMEs, avail themselves of the services of customs agents for export and import clearance, if irrespective of their nature of business (e.g., ready-made garments, frozen foods, leather, and jute and jute goods) or geographical location (whether in Chittagong, Dhaka or Khulna). Therefore, the importance of trade facilitation measures cannot be ignored in the internationalization of SMEs.

One of the key objectives of the survey was to include as many experienced traders and customs agents as possible in order to create a representative data set. It was encouraging to see that about 58 per cent of the traders covered by the survey had been involved in international trade for 6-10 years (figure 7). Another 27.5 per cent were found to have been in the business for 11-22 years. As for the customs agents, about 53 per cent had been providing trade-related services to the various export-oriented

Some large-scale industries deal with customs procedures directly through their own clearing houses.

¹⁶ Some large-scale industries deal with customs procedures directly through their own clearing houses.

industries in Bangladesh for 11-15 years while another 40 per cent had been engaged in providing services for 16 to 22 years.

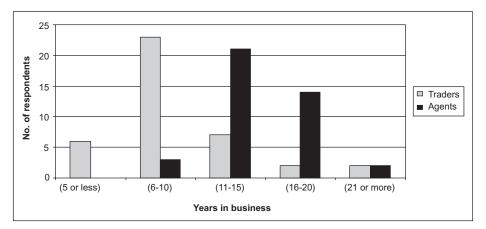


Figure 7. Length of experience of respondent traders and agents

Source: Centre for Policy Dialogue-ARTNeT Perception Survey, 2008.

2. Adapting to electronic lodgement

The introduction of DTI in 2003 was intended to make customs data processing less cumbersome through electronic lodgement of declarations. However, it became evident within a very short period that this process was not providing any significant benefits to the stakeholders (Bhattacharya and Hossain, 2006). This finding was corroborated by the fact that an overwhelming majority of the respondents (70 per cent of SMEs and 80 per cent of agents) mentioned that DTI did not adequately serve their purpose for documentation lodgement and customs procedures. However, all the trader respondents and about half of the agents agreed that DTI had contributed towards increasing the number of declaration lodgements compared with the pre-DTI era. This also underscored the fact that customs agents were able to serve more clients after the introduction of DTI. Nevertheless, there was wide agreement between the two respondent groups regarding the problems they faced in using the DTI system (table 10).

One of the major transitions from DTI dependency to CCH automation was that all the registered customs agents were assigned individual user IDs and passwords. In order to obtain an ID and password, agents and businesses need to apply to DataSoft, the software company responsible for the implementation and overall technical management of the automation system.

In view of the above-mentioned shortcomings, DataSoft is perceived as providing encouraging technical support to traders and agents in the context of customs documents processing. The survey, which was conducted within two months of the launch of the CCH automation project, found that the target stakeholders (customs agents) were already

benefiting from the initiative to some degree. While there was some criticism, particularly with regard to unexpected technical errors, the majority of the respondents welcomed the initiative, which currently has more than 3,000 registered users. The reasons given by the respondents for the preference of the current automation over DTI are outlined in table 11.

Table 10. Problems with DTI lodgement

Reasons	Percentage of traders	Percentage of agents
Absence of a 24-hour service	100.0	100.0
Absence of ID or password	100.0	100.0
Customs valuation	90.0	95.0
Unskilled customs staff	87.5	98.0
Lack of good governance, transparency and responsibility	87.5	85.0
Need for agents to visit the customs house physically	84.5	100.0
Non-availability of IGM and EGM	80.5	100.0
Misuse of time	78.0	97.5
Manual noting system	76.0	86.0
Speed money/bribes	62.0	92.5
Inadequately trained DTI operators	45.5	86.0

Source: Centre for Policy Dialogue-ARTNeT Perception Survey, 2008.

Table 11. Reasons for preferring current system of electronic data submission

Reasons	Percentage of traders	Percentage of agents
ID and password provided for individual agents	100.0	100.0
Electronic access to IGM and EGM	100.0	100.0
Opportunity to end corruption	100.0	75.5
Less complicated	97.0	94.5
Faster service	93.0	90.5
Lower scope of manipulation	90.5	86.0
A 24-hour service	88.0	94.5
Limited scope for bribery	80.5	85.0
Improved transparency and accountability	80.0	100.0
Trained professionals for overall management of the system	76.5	85.0
Faster inspection	74.5	65.5
Adequate training and technical support to traders and agents	66.0	90.0
Less opportunity for bargaining	60.5	60.5

Source: Centre for Policy Dialogue-ARTNeT Perception Survey, 2008.

The respondents were asked to underscore some benefits that they thought would result from the current automation process. Figure 8 provides a graphic presentation of the responses received.

Reduction of corruption 97.5 82.5 Increase in 97.5 clients Reduction of 100 lodgement cost 97.5 Reduction of clearance time 100 Reduction in 97.5 lodgement time Percentage of respondents Agents Traders

Figure 8. Perceived benefits of customs automation for SMEs

Source: Centre for Policy Dialogue-ARTNeT Perception Survey, 2008.

In addition to the above benefits, the majority (more than 95 per cent) of the respondents from the trading community as well as customs agents anticipated that effective implementation of the automation system would result in:

- (a) The ability to provide quicker service to clients;
- (b) Freedom to work outside the normal customs working hours;
- (c) Reduced travel, queues and delays at customs;
- (d) Easy access to declaration data in the system.

In view of all the administrative and procedural complexities, it is encouraging that almost all the SME traders and agents held a similar opinion when expressing their concerns about the benefits from automation. Nevertheless, the extent of satisfaction among the stakeholder groups concerning the level of automation varied with regard to some aspects. A large number of the respondents were of the view that there was still a great deal of work to be done to obtain the expected benefits from customs automation. A list of such measures is presented in table 12.

Table 12. Measures required for developing automation in trade facilitation

Management of	Percentage of	respondents
Measures required	Traders	Agents
Trade-related infrastructure development in the ports and other government institutions	100.0	100.0
Online availability of all trade-related policies and regulations	85.5	80.0
Training manpower to create a skilled working group	62.5	42.5
Permanent deployment of the Army at Chittagong port	75.0	12.5
Connectivity with the banks concerned as well as other trade-related organizations	57.5	25.0
Change the attitude of customs personnel	35.0	27.5
Introduction of a one-stop service	27.5	20.0
Improved relationship among customs brokers	25.0	17.5
Modernization of port facilities	25.0	10.0
Privatization of the Chittagong port	20.0	12.5
Continuous power supply	15.0	40.0
National valuation data for customs assessment procedure	15.0	20.0
High-speed Internet	12.5	32.5
Politics involving Chittagong port should be stopped	12.5	10.0
Easier valuation system	5.0	15.0
Port expansion	5.0	15.0
Employing a strong and effective monitoring cell	5.0	12.5

Source: Centre for Policy Dialogue-ARTNeT Perception Survey, 2008.

The above list is an indication that the trading community and customs agents still face a diverse range of administrative, procedural, infrastructural and policy-related bottlenecks. The lack of skilled manpower in customs processing has been highlighted, particularly in the case of customs inspectors and superintendents. Available information reveals that there have been no appointments of additional customs inspectors during the past two and a half decades. This clearly creates pressure on the existing group of inspectors who, on many occasions, find it difficult to cope with the technological advancements in customs procedures.

Another critical factor in ensuring proper functioning of the automation process is the necessary provision of a secure and uninterrupted power supply. This is coupled with the need to provide the proper infrastructure and technology for high-speed Internet connections to be used in data processing and dissemination. The establishment of a monitoring cell, although emphasized at a lower level, deserves adequate and consistent attention from the regulatory authorities to ensure compliance management.

Apart from highlighting the need for infrastructural development at the ports and other related government institutions, another key finding from the survey was that the majority of the respondent SMEs (75 per cent) felt that members of the Armed Forces should remain deployed in the port area to stop corruption and ensure faster clearance procedures. On the other hand, only 12.5 per cent of the customs agents shared this view. This is explained by the fact that the majority of the respondent customs agents did not address this issue. It should be noted that soon after the caretaker Government came to power in early 2007, it undertook large-scale measures to eliminate corruption, particularly in the public sector. As part of this drive, the Armed Forces were deployed at Chittagong port.

As part of a recently completed study by the Centre for Policy Dialogue (Rahman and others, 2008), a perception survey was conducted to elicit information from the business community with regard to identifying constraints affecting their businesses. The survey findings are summarized in table 13.

Table 13. Constraints affecting business in Bangladesh

Constraints		AWF*	Rank			
oonon anno	High	Moderate	Low	Total	7	rann
Trade-related infrastructure	17 (53.1)	11 (34.4)	4 (12.5)	32 (100)	2.41	1
Building productive capacity	15 (44.1)	14 (41.2)	5 (14.7)	34 (100)	2.29	2
Trade development	15 (44.1)	12 (35.3)	7 (20.6)	34 (100)	2.24	3
Trade policy and regulations	15 (44.1)	11 (32.4)	8 (23.5)	34 (100)	2.21	4
Trade-related adjustment	9 (29.0)	20 (64.5)	2 (6.5)	31 (100)	2.23	5

Source: K.M. Rahman and others, 2008.

*AWF = Average weighted frequency.

Note: Figures in parentheses are percentages.

The information provided in tables 14 clearly indicates that common concern exists among the traders and customs agents with regard to facilitating trade by properly addressing the existing constraints. The five broad categories, developed by OECD as the five pillars for assessing the needs for Aid-for-Trade, encompass all sectors of trade facilitation; these range from infrastructural development and capacity-building, through adopting state-of-the-art technology, to diversifying trade and ensuring easy access to trade-related policies and regulations. The Government needs to come up with pragmatic policy initiatives in this context.

When asked if the newly introduced customs automation system would have an impact on SMEs, all the trader respondents were overwhelmingly positive. (However, as

noted above, so far only the customs agents and a few large-scale industries use the system.) A similar reaction was expressed by about 70 per cent of the customs agents while the remaining 30 per cent were uncertain of the possible outcome. A list of the possible impacts is presented in table 14.

Table 14. Impact of automation on trade performance of Bangladesh SMEs

Reasons	Percentage of agents
Greater integration into international trade	70.0
Faster document processing for exports	63.5
Improved goodwill and business reputation	60.0
Business expansion	55.0
Reduced production time	45.5
Possibility of emergence of stronger backward linkage industries	45.5
Frequent import of raw materials	42.0

Source: Centre for Policy Dialogue-ARTNeT Perception Survey, 2008.

With regard to adjusting to the new IT environment, respondents were also asked if they would be willing to set up the necessary infrastructure/equipment (dedicated room or floor space, computers, Internet connection etc.) for effective use of the automation system. Some 93 per cent of the customs agents and 100 per cent of the SME respondents indicated a positive viewpoint. The rest were uncertain as to whether or not they would be willing to make such an investment.

In addition, as many as 94 per cent of the respondents reported the availability of at least one computer with an Internet connection as well as fax machines in their offices. This is a positive attitude towards adapting to technological upgrading in documentation lodgement. In view of these findings, it appears that the SMEs have a strong will to utilize business-supportive initiatives to ensure enhanced access to the global market.

E. Conclusion and policy recommendations

The Government of Bangladesh has been revisiting its industrial policies with the objective of making them business-friendly for SMEs. However, effective measures focusing on expediting and ensuring the proper integration of SMEs into the multilateral trading system still appear to be far from adequate. The survey revealed that the private sector representatives were quite concerned about this situation; they strongly emphasized the need to utilize the existing automation system effectively while making every effort to develop the system in view of the requirements of the business community.

It must be recognized that while businesses are facing a large number of administrative, regulatory, legislative and policy-related bottlenecks, the lack of available resources sometimes makes it challenging for the Government to address such private sector concerns in a timely manner. Moreover, uncertainty over a successful completion of the Doha Round negotiations in WTO also poses strategic challenges for the Government in terms of policy formulation.

Taking into consideration the preceding discussion, a set of policy recommendations is detailed below.

1. Establishing a single window

While the automation of CCH is considered a positive milestone in ensuring implementation of IT in trade facilitation, it is evident that the whole process is limited in application, in the sense that it has yet to be developed into a single-window initiative linking all government agencies (e.g., various ministries, quality-testing institutes etc.). However, in an era of paperless trade, this has to be overcome. To that end, the current form of automation needs to be upgraded to the level of establishing a single window. This can then be expanded to creating a regional single window within the South Asian Association for Regional Cooperation. The APEC single window initiative can be a reference point in this regard.

In addition, more productive use of information technology must be made in order to increase the efficiency, effectiveness and transparency of revenue collection by expediting customs clearance procedures. Such a measure will be a step towards effective utilization of the automated system. Furthermore, this will enhance transparency and help eliminate corruption among customs officials.

2. Expediting the automation process by eliminating bureaucratic obstacles

The Government should implement immediate measures to complete all bureaucratic formalities in order to ensure timely operation of the automation project at DCH. In addition, the Bangladesh Bank should not delay issuing the required official circular to expedite the process whereby importers and exporters use electronic fund transfers to pay their customs duty directly from their accounts.

3. Ensuring better risk management procedures

A state-of-the-art automation system needs to be put in place to ensure customs "data mining". This is critical not only in terms of simplifying document lodgement, but also to ensure effective risk management procedures, including: (a) screening shipments against predetermined risk criteria based on documents lodged; (b) identifying the nature and level of risk, and prioritizing accordingly; and (c) resolving the risk. Although the green, yellow and red channel concepts are in operation, they are mainly implemented on the basis of self-determination by the customs officials. The customs database needs to be designed in such a way as to maintain historic data on importers and exporters, which will eventually help to determine the level of risk based on the compliance record of the traders.

4. Introducing the concept of Authorized Economic Operator

Authorized Economic Operator or "authorized trader" refers to businesses that are sufficiently well-known and trusted by the customs authorities for them to be exempted from ordinary controls, and subject to much lighter or flexible procedures and requirements. Such businesses are frequent and reliable traders, with good compliance records of accurate declarations and timely payments. Bangladesh should formulate a set of criteria to determine traders' eligibility as AEOs. The underlying objective of the initiative would be to enable importers and exporters to benefit from expedited clearance and increased security for shipments entering or leaving the region. Such benefits could also include the option of periodic payment of duty for compliant traders. The AEO programme was officially launched in Europe on 1 January 2008. As mentioned above, the "SAFE Framework", developed by WCO, details the conditions and requirements for AEOs.

5. Fostering customs-to-customs cooperation

Harmonization of customs procedures with international standards largely depends on the degree of cooperation among the customs authorities in various countries. Bangladesh, in strategic partnership with its regional neighbours, will need to put in place a mechanism to ensure proper and adequate exchange of information with customs authorities of other countries. A policy should also be developed on introducing periodic training programmes whereby the customs authority in one country, individually or jointly with another Customs Administration, will train officials of customs and other border agencies from member countries of the South Asian Association for Regional Cooperation and the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation on the latest relevant developments, both within and outside the regional blocs. Such measures are crucial not only to ensuring supply chain security, but also for faster clearance of goods at the ports.

6. Ensuring customs-to-business cooperation

With to the aim of ensuring effective utilization of the automated system, the Government needs to set up the necessary infrastructure as well as train customs officials and representatives of the private sector (including SME representatives, shipping agents and freight forwarders). This is very important, not only to ensure "informed compliance" on the part of the business community, but also to strengthen their relationship with the customs authorities. A sound and effective customs-to-business consultation mechanism should also be developed to ensure adequate participation by all relevant stakeholders.

7. Strengthening business-to-business relationships

The launch of the SME Foundation in mid-2007 earned the Government appreciation from all segments of the business community. One of the landmark programmes of the Foundation was the establishment of 32 helpline centres for SMEs to use the Internet and receive training on the use of IT. In addition, the Foundation should ensure that new members with the potential to perform better in international markets receive guidance and assistance from the more experienced "international SMEs" (Lester

and Terry, 2008) with regard to identifying and clarifying the problems faced on the international front.

8. Identifying needs and priorities

The previous sections of this chapter have raised a number of critical issues that need immediate attention from policymakers. In considering these issues, the Government should carry out a needs assessment study, taking advantage of the needs assessment tool developed by OECD, with particular focus on the concerns of SMEs in relation to trade facilitation. Priorities will then have to be set for resource allocation.

9. Providing stimulus packages for business sectors

In view of the current recession in the developed world and the various stimulus packages offered by Bangladesh's competitors, the Government needs to become proactive by designing and offering trade-enhancing stimulus packages to help SMEs deal with the fierce competition in its major international markets. Close monitoring of the developments taking place at the international and domestic levels is required. One way of doing this is for the Government to set up sector-specific monitoring cells comprising relevant ministries, business bodies and trade analysts. Although a number of measures have been proposed under the national budget for 2009/10 – some of which have already been implemented – in order to safeguard the domestic economy from negative impacts of the global economic crisis, more allocations are required for SMEs and more sectors need to be covered.

In addition, the Government must seriously take into account the importance of IT application in trade facilitation. This will help SMEs to act as a thrust sector for balanced and sustainable industrial development in the country, by enabling them to face the challenges of the free market economy and globalization. Ensuring trade facilitation through the proper application of IT will play a significant role in attaining this objective.

10. Ensuring effective participation in WTO negotiations

Bangladesh needs to monitor closely the developments taking place in the ongoing WTO Doha Development Round negotiations. The submission of a needs-based proposal to the Negotiating Group on Trade Facilitation is also required on an urgent basis. To this end, careful scrutiny of the ongoing WTO negotiations regarding trade facilitation, and examination of how these negotiations could help Bangladesh by reviewing the proposals in the WTO negotiations and their possible implications, should be carried out at the national level.

Effective implementation of the above recommendations could play a positive role in ensuring meaningful participation by SMEs in Bangladesh's external sector performance.

Annexes

Annex 1. Data tables and figures

Annex table 1. Definition of SMEs in Bangladesh

Source	Small enterprise	Medium-sized enterprise
Industrial Policy, 1991	_	s activities with a fixed total Fk 30 million (US\$ 430,500) ablishment, and transport cost
	 No distinction was made be enterprises. 	etween small and medium-sized
Industrial Policy, 1999	Enterprises employing fewer than 50 workers and/or with a fixed capital investment of less than Tk 100 million (US\$ 1.45 million).	Enterprises employing 50-99 workers and with a fixed capital investment between Tk 100 million (US\$ 1.45 million) and Tk 300 million (US\$ 4.35 million).
Industrial Policy, 2005	 Manufacturing sector: industries having fixed assets below Tk 15 million (US\$ 218,000). Non-manufacturing sector: enterprises employing less than 25 labourers. 	Manufacturing sector: Industries having fixed assets between Tk 15 million (US\$ 218,000) and Tk 100 million (US\$ 1.45 million). Non-manufacturing sector: Enterprises employing 25-100 labourers.
Bangladesh Bank, 2008	Services: Total fixed assets (TFA) of Tk 50,000 (US\$ 725) to Tk 5 million (US\$ 72,500) (excluding land and building). Less than 25 employees. Trading: TFA of Tk 50,000 (US\$ 720) to Tk 5 million (US\$ 72,500) (excluding land and building). No. of employees: less than 25 persons. Manufacturing: TFA of Tk 50,000 (US\$ 720) to Tk 15 million (US\$ 218,000) (excluding land and	Services: TFA of Tk 5 million (US\$ 72,500) to Tk 100 million (US\$ 1.45 million) (excluding land and buildings). Less than 50 employees. Trading: TFA of Tk 5 million (US\$ 72,500) to Tk 100 million (US\$ 1.45 million) (excluding land and building). Less than 50 employees. Manufacturing: TFA of Tk 15 million (US\$ 218,000) to Tk 200 million

Annex table 1 (continued)

Source	Small enterprise	Medium-sized enterprise
	building). Less than 50 employees.	(US\$ 2.9 million) (excluding land and building). Less than 150 employee

Source: Adapted from M.E. Islam M.M. Rahman, and N.N. Rikta, 2008.

Annex table 2. Exports and imports by sea, air and land, 1996/97-2007/08

		Ехро	orts			Impo	orts	
Financial year	Total (US\$ million)	Sea (%)	Air (%)	Land (%)	Total (US\$ million)	Sea (%)	Air (%)	Land (%)
1996/97	4 017.7	98.7	1.3	*	6 795.9	74.7	10.1	15.2
1997/98	5 046.4	97.6	2.4	*	7 015.3	85.0	5.1	10.0
1998/99	5 110.7	98.6	1.4	*	7 095.7	83.9	4.3	11.8
1999/2000	4 917.8	98.3	1.7	*	7 394.6	84.5	11.2	4.3
2000/01	5 679.7	90.9	9.1	*	8 097.6	86.0	8.5	5.5
2001/02	5 260.6	92.6	7.4	*	9 027.4	92.9	7.0	0.1
2002/03	5 835.7	90.8	9.2	*	8 742.7	85.4	7.7	6.9
2003/04	7 416.0	99.2	8.0	*	10 695.0	98.8	*	1.2
2004/05	8 679.4	100.0	*	*	12 542.0	99.1	*	0.9
2005/06	10 315.3	100.0	*	*	14 346.2	99.5	*	0.5
2006/07	12 318.0	99.0	*	1.0	16 205.5	99.5	*	0.5
2007/08	14 372.2	82.1	15.5	2.4	21 818.1	80.8	12.2	7.1

Source: Bangladesh Bureau of Statistics, 2009.

^{*} Data not reported.

Annex table 3. Vessels handled at Chittagong and Mongla ports

	Both _I	oorts	Chittago	ng port	Mongl	a port
Year	Number of Vessels	Number of days*	Number of Vessels	Number of days	Number of Vessels	Number of days
1992/93	1 437	7.76	1 058	5.1	379	15.17
1993/94	1 376	4.87	1 070	4.42	306	6.45
1994/95	1 553	5.66	1 172	4.88	381	8.04
1995/96	1 652	5.93	1 286	5.13	366	8.72
1996/97	1 694	5.46	1 326	4.69	368	8.25
1997/98	1 599	16.46	1 257	7.11	342	9.35
1998/99	1 810	14.3	1 425	6.49	385	7.81
1999/2000	1 778	12.87	1 439	5.9	339	6.97
2000/01	1 930	11.3	1 615	6.15	315	5.74
2001/02	1 823	9.91	1 557	5.1	266	4.81
2002/03	1 974	8.61	1 683	4.76	291	3.85
2003/04	2 194	8.56	1 748	4.24	446	4.32
2004/05	2 438	8.3	1 983	4.57	455	3.73
2005/06	2 682	9.55	1 906	4.93	776	4.62
2006/07	2 106	10.31	1 913	6.38	193	3.93
2007/08	2 202	10.07	2 074	5.07	128	5.00

Source: Bangladesh Bureau of Statistics, 2009.

^{*} Weighted average.

Annex table 4. Cargo handled at Chittagong and Mongla ports

(Unit: '000 metric tons)

Year	Total for	Ch	ittagong Po	ort		Mongla Por	t
rear	both ports	Total	Export s	Imports	Total	Exports	Imports
1995/96	13 028	10 189	1 451	8 738	2 839	396	2 443
1996/97	13 192	10 498	1 435	9 063	2 694	520	2 174
1997/98	11 253	8 386	692	7 694	2 867	528	2 339
1998/99	13 835	10 514	650	9 864	3 321	369	2 952
1999/2000	14 336	11 326	551	10 775	3 010	310	2 700
2000/01	14 961	12 254	578	11 676	2 707	305	2 402
2001/02	15 673	13 420	585	12 835	2 253	306	1 947
2002/03	17 034	15 274	679	14 595	1 760	351	1 409
2003/04	16 600	15 105	547	14 558	1 495	317	1 178
2004/05	18 530	17 053	580	16 473	1 477	222	1 255
2005/06	19 401	17 917	583	17 334	1 484	269	1 215
2006/07	19 076	18 159	510	17 649	917	253	664
2007/08	19 028	18 301	454	17 847	727	209	518

Source: Bangladesh Bureau of Statistics, 2009.

Annex table 5. Role of stakeholders in IGM and EGM module

Stakeholder	Different roles	Tasks
Shipping agents	As: feeder vessel declaring agent (SAF)	Shall declare the vessel name, and the voyage apply for rotation number online to CHC. Once the shipping agent receives all the manifests from all the parties such as shipping agents (main line operator with boxes), freight forwarders etc., any short/excess goods found after comparison with his own record will be recorded as remarks. (For example, if the number of boxes received on the manifest is 500 TUES and actual incoming terminal departure report shows 490 TUES, then SAF will indicate this with a remark of "10 TUES" and note from the record to whom the cargo belongs.) SAF will also submit documents such as: Letter of authorization Arrival report duly signed by master Retention cargo certificate Inward certificate from the shipping master Load line certificate Certificate that the ship is not carrying any dangerous cargo Last port clearance Stores list List of arms and ammunition and explosives As per the usual practice for the final entry of the vessel.
Shipping agents	As: main line operator (MLO) with boxes	 Shipping agents (MLO with boxes) will submit their manifest data electronically via the Internet. Also, the file upload application software can be used to upload the IGM data through an Excel file. Assign a freight forwarder as a consignee or notify.
Freight forwarders		 The freight forwarders sign in and submit their respective manifests Assign a clearing and forwarding agent or ultimate importer.
Clearing and forwarding agents		 Clearing and forwarding agents will be able to see the manifest and: Submit cross-match information Update cross-match information View dispute list Assign themselves as a clearing and forwarding agent. If otherwise, the matter will be treated in accordance with the customs law.

Annex table 5 (continued)

Stakeholder	Different roles	Tasks
Chittagong Port Authority		 Input vessel arrival and departure times and dates into the system Can view IGM information and able to input discharge, delivery and elicit information of particular IGM and its container for full container load (FCL) and less than full container load (LCL).
Off Docks/ ICD		 Can view IGM information, input discharge and delivery, and elicit information about a particular IGM and its container for FCL.
Customs House		 Create a role base user/org. list with access permission. Assign an auto rotation number (general/ supplementary); the IGM/EGM and CCH respective desks will update the rotation-related record in their books. Submit disputes. View incoming amendments. Check and approve amendment requests. Give final approval of amendment request. Generate a report of each up-to-date IGM. Generate dynamic reports combining line + B/L number, which items they handle for which IGM, for which shipping agent and MLO/freight forwarder, and which clearing and forwarding agent IGM operation status update such as: bill of entry not yet posted; bill of entry posted but not yet accessed; accessed but not paid; paid but not delivered. Once all the related manifest data have been received by CCH, and after verification with other documents such as BE, the bank document will issue the findings by noting on the respective manifest. The stakeholders will be able to see the notes once they sign on to the system. Customs should able to view the task list of clearing and forwarding agents for the importers they are representing. All requests from MLO for amendment have to be processed. Revolving account management to realize various deducting amendments from various MLOs/freight forwarders

Annex table 5 (continued)

Stakeholder	Different roles	Tasks
Navy		For dangerous goods and hazardous cargo. After the manifest is declared on the control panel, Navy users (assigned personnel) will inspect the cargo description and make their marks/comments/action on it for further action
Bank and Financial Institutions		 Assist in opening revolving accounts for the immediate stakeholders. Define the mechanism to debit/credit via intra-bank and inter-bank. L/C and L/CA information. Amendment.

Source: DataSoft.

Annex table 6. Role of stakeholders in Bill of Entry module

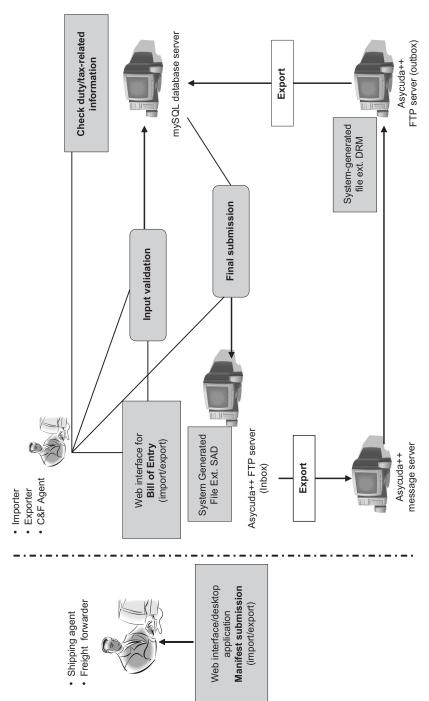
Stakeholder	Tasks
Clearing and forwarding agents	 Review the manifests. Create working list and Bill of Entry. Update Bill of Entry. Check whether or not the number of packages, invoice value, items etc. is correct. Final submission of Bill of Entry. Detail of Response Message process status check. After-assessment. Declaration status check. Add additional information (add/edit). Report (view).
Traders (importers, exporters etc.)	 Clearing and forwarding agents will be able to see the manifests and: Create working list; Bill of Entry; Update Bill of Entry; Check whether or not the number of packages, invoice alue, items etc. are correct. Final submission of Bill of Entry. Delete. Detail of Response Message process status check. After-assessment. Declaration status check. Add additional information (add/edit) and report (view).
Custom House	 View Bill of Entry submitted by the organizations. Bill of Entry submission process status – completed/in process. After successful submission of the Bill of Entry, the remaining processes should be completed through ASYCUDA++.

Source: DataSoft.

Banglabandha 🗖 Burimari ICD Landport Airport Seaport Roads **District Boundary** Birol 1 Tamabil Haluaghat Hili Sonamasjid [Akhaura Bibir Bazaı Darshana 🖺 Benapol i Bhomra 📑 Chittagong Teknat

Annex figure 1. Location of ports (air, land and sea) in Bangladesh

Annex figure 2. Work flow: Bill of Entry, import/export



Source: DataSoft.

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