

Impact of IT related Trade Facilitation Measures on SMEs:

An Overview of Indian Experience

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Structure of the Presentation

- The Context
- Role of SMEs
- Cargo Clearance and IT
- Dwell Time
- Survey Results
- Special Case Study
- Way Forward

The Context

- In the early nineties, India launched a comprehensive economic liberalization programme which was supplemented by the introduction of various trade facilitation (TF) measures, including efforts to improve cargo clearance, through the introduction of automation-related initiatives.
- The introduction of the Information Technology Act (2000), which proposes institutional support to ensure commitment for e-governance and provided a major policy impetus for TF.
- This led to the establishment of a Certificate Authority for accepting electronic signatures and boosted the growth of IT services and IT Enabled Services (ITES) in the trade sector.
- The Union Finance Minister (1999-2000) articulated the necessary political will for launching various TF measures and announced the setting up of a Task Force on Indirect Taxes chaired by Mr. Vijay Kelkar (Kelkar Committee).

The Context

- The Task Force, in its report, suggested a major automation programme for the customs department.
- The IT Act 2000 empowered the Central Board of Excise and Customs (CBEC) to issue digital signature certificates which would make it possible to provide legal validity to the electronic declarations.
- The Ministry of Finance later in 2004 constituted a Working Group headed by Jayanta Roy on Trade Facilitation (WGTF) to suggest a roadmap for developing a comprehensive action plan for trade facilitation.
- It suggested evolving specific policy instruments that related to dwell time, greater automation and other issues to improve the efficacy and effectiveness of the Indian trade facilitation measures.

The Context

- In the Indian context several studies have assessed the adoption of TF measures on the government's functioning from various stand-points (like Chaturvedi (2007), Taneja (2004) and Sengupta (2003)).
- There are apparently no studies on the implications of TF measures for the private sector, particularly, for small and medium enterprises (SMEs).
- In 2006, the Committee on Infrastructure chaired by the Prime Minister constituted an Inter-Ministerial Group (IMG) to suggest ways and means for reducing dwell time for cargo clearance but its focus was not on how SMEs or the private sector for that matter cope-up with the new working environment vis. a vis. customs and other agencies.

The Context

- The debate at the WTO negotiations becomes equally interesting. EC and Switzerland raised the issue of equal and transparent treatment for customs brokers, particularly for the new entrants.
- EC in another proposal with Mongolia delineated specific criteria for authorised traders such as, an appropriate record of compliance with customs requirements; a system of managing records to allow for necessary controls; financial solvency (including, where appropriate, provision of a sufficient security/guarantee); and an appropriate system of security and safety standards.

Role of SMEs

- In the Indian economy, SMEs play an important role in the country's economic growth and trade.
- Recently, the Indian government has restructured the ministries dealing with small and medium enterprises by amalgamating the Ministry of Small Scale Industry and the Ministry of Agro and Rural Industries.
- The new establishment is known as the Ministry of Micro, Small and Medium Enterprises (MMSMEs).
- The micro, small and medium enterprises are defined differently for the manufacturing and services sectors under the Micro, Small and Medium Enterprises Act, 2006.

Role of SMEs

Definition of MSM Enterprises

	Investment in plant and machinery/equipment (excluding land and building)	
	Manufacturing Enterprises	Service Enterprise
Micro	Up to USD 0.056 million	Up to USD 0.02 million
Small	More than USD 0.056 million and up to USD 1.12 million	More than USD 0.02 million and up to USD 0.45 million
Medium	More than USD 1.12 million and up to USD 2.25 million	More than USD 0.45 million and up to USD 1.12 million
Source: Government of India, Ministry of Small Scale Industries, Annual Report (2006-07).		

Role of SMEs

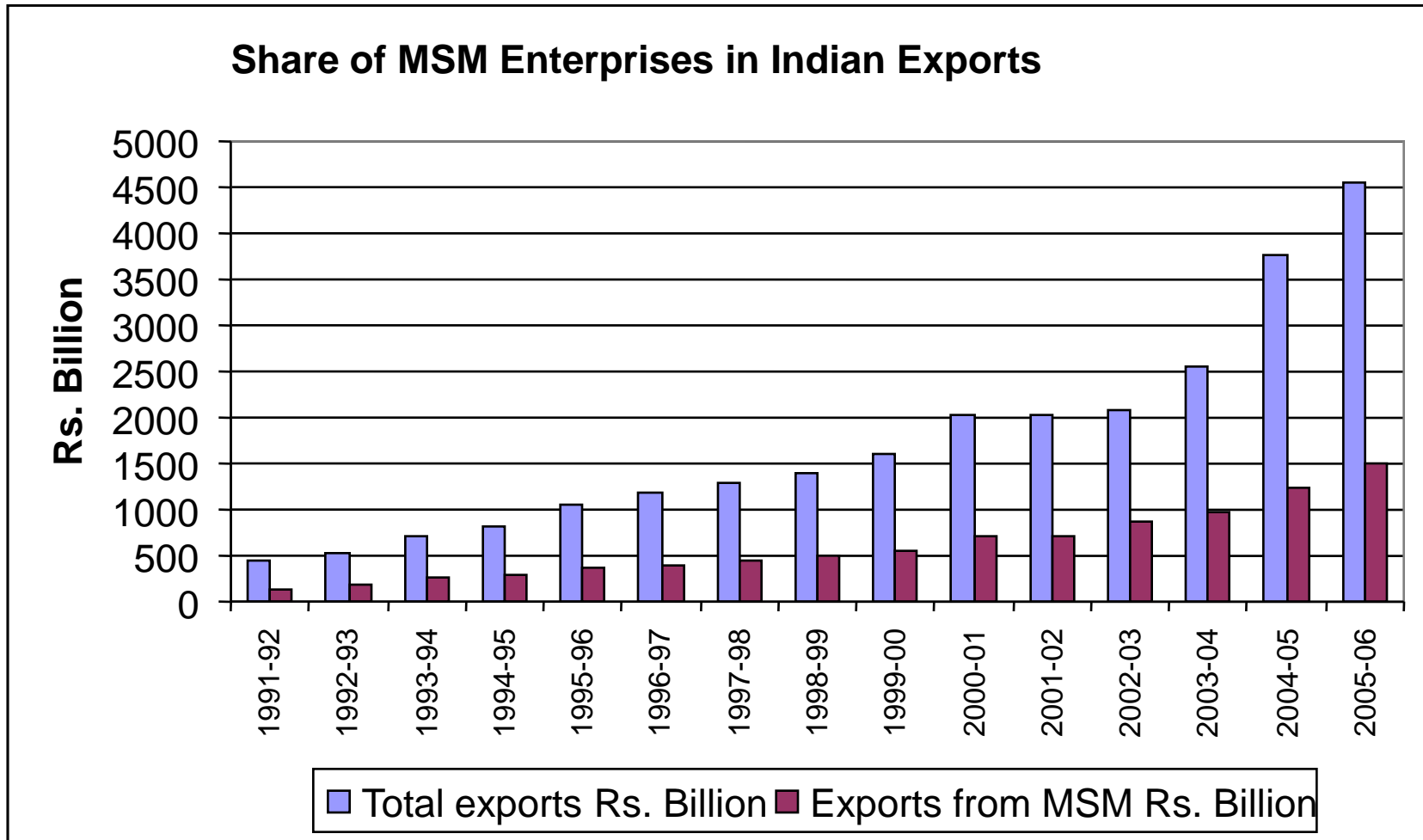
- The Micro, Small and Medium Enterprises are playing an important role in the Indian economy.
- It is estimated that in terms of value, the sector accounts for about 39 per cent of the manufacturing output and around 33 per cent of the total export of the country.
- It has also shown a higher growth rate compared to the overall industrial sector.
- A major advantage of the sector is in terms of employment potential, as it is estimated to have 31 million persons spread over 12.8 million enterprises.

Role of SMEs

- The MSM enterprises have continuously contributed towards expansion of exports from these units.
- Further, MSM enterprises have continued to enjoy exclusive manufacturing rights over several items since the last several years.
- However, over the period of liberalization the list with exclusive areas for MSMEs has been reduced.
- Initially, there were more than 800 items listed but now this has been reduced to 21 items which include items such as PVC pipes, rolling shutters, steel furniture, padlocks, laundry soaps and utensils.

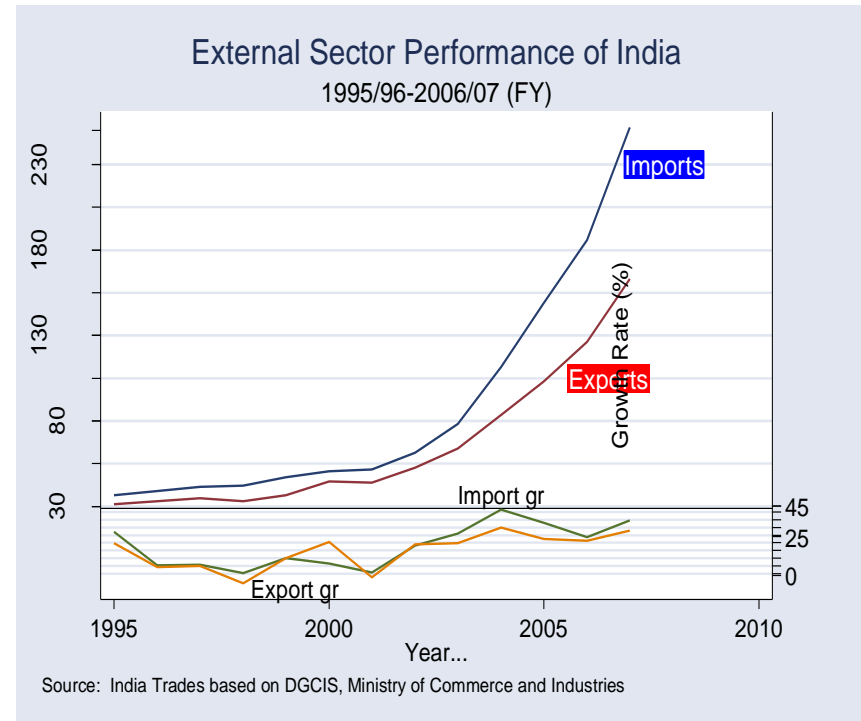


Role of SMEs



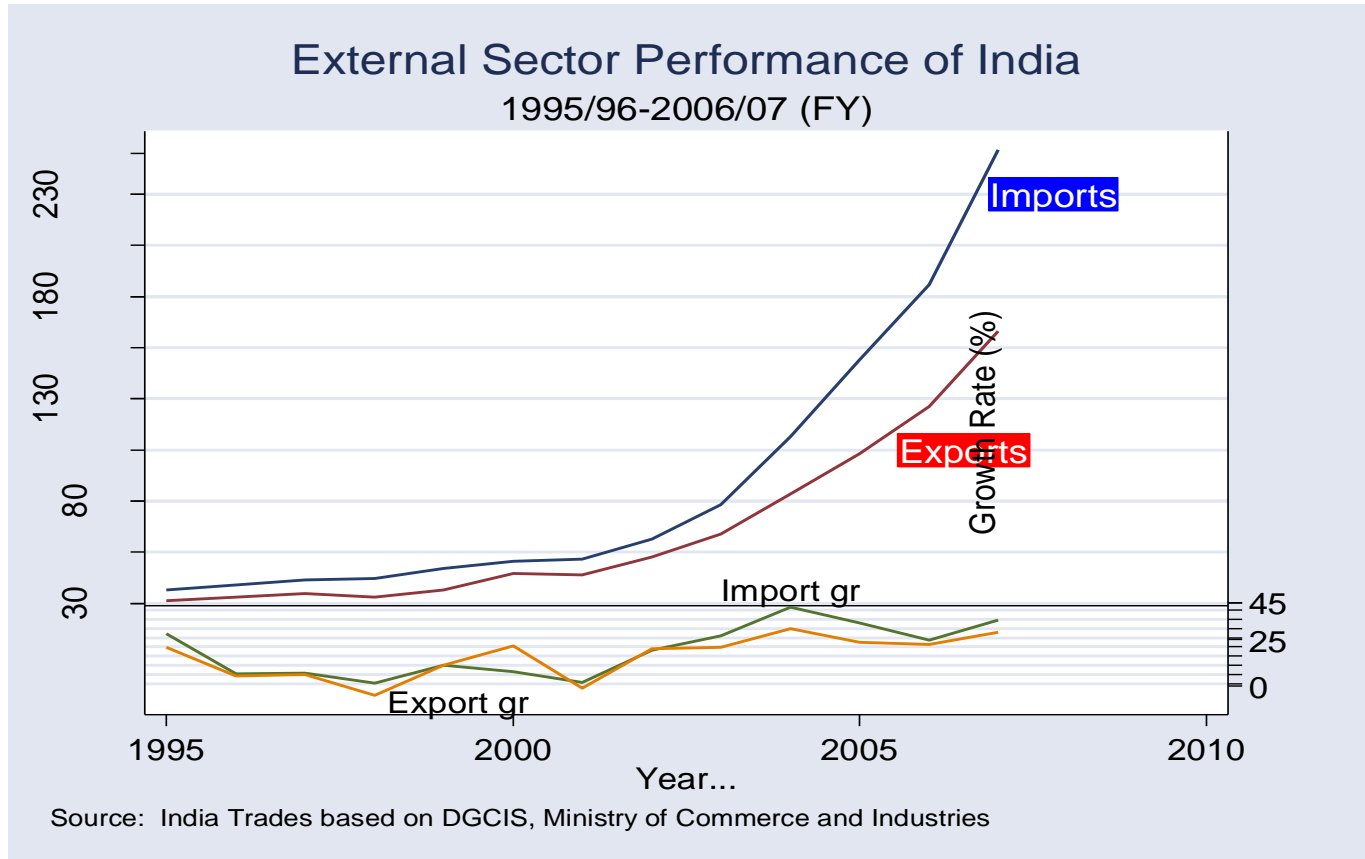
Role of SMEs

- India's external sector performance has been robust since the beginning of the economic reforms, and received further impetus during the early part of the new millennium.
- The overall growth performance of the sector was more profound in the present decade.
- The external sector expanded at an average rate of 25.6 per cent during 1999-01 over 2005-07 in dollars terms, and at the rate of 20.9 per cent in rupee terms during the same period.



- The value of merchandise exports reached US \$ 162 billion in 2007-08 (see Fig. 1). Similarly, merchandise imports grew by 24.5 per cent to US \$ 251.5 billion in 2007-08.

Role of SMEs





Cargo Clearance and IT

- The Central Board of Excise and Customs (CBEC) is the nodal agency under Ministry of Finance, which is spearheading the customs' automation programme in a major way.
- The CBEC maintains a comprehensive website which contains detailed information on all the acts, rules, regulations, circulars and CBEC notifications issued from time to time.
- Over 30,000 pages covering these details are posted on the website. Apart from this, there is a powerful search facility for extracting relevant information made available on the site.



Cargo Clearance and IT

- The CBEC released a 'Vision and Strategy Document' in 1998, emphasizing commitment to TF through a practical and pragmatic approach.
- Adoption and application of information communication technology (ICT) is the major plank of the Indian Customs' initiatives to expedite the clearance of import and export cargo and provide a fool-proof paperless system of assessment and clearance. India has launched trade enabling policy reform.
- In this context, it has initiated various efforts including the setting up of 'ICEGATE', 'eTrade' and 'eBiz' under the National e-governance programme.

Cargo Clearance and IT

Various Trade Automation Initiatives in India				
S.N.	Initiatives	Parent Department	Year	Coverage
1	ICES	CBEC, Ministry of Finance	1992	Specific customs locations
2	ICEGATE	CBEC, Ministry of Finance	1995	Integrated customs network
3	eTrade	Ministry of Commerce and Industry	1997	Compatibility between various trade agencies
4	ACP/RMS	CBEC, Ministry of Finance	2005	Compliant large traders
5	PCS	Indian Port Association, Ministry of Shipping	2008	Integrates all the major ports and all the major actors at the port
<i>Source: Compiled by Author.</i>				



Cargo Clearance and IT

Indian Customs and Excise Electronic Commerce/Electronic Data Interchange Gateway (ICEGATE)

- CBEC further took steps to improve connectivity and achieve compatibility within the custom's stand alone locations by launching ICEGATE in 2002.
- This facilitates remote filing of import and export declarations by the importer/exporter/CHA through the ICEGATE portal.
- On an average, about 18000 to 20000, import and export declarations are being filed daily using the ICEGATE facility.
- All the airlines are filing their import and export manifests using this system.



Cargo Clearance and IT

Indian Customs and Excise Electronic Commerce/Electronic Data Interchange Gateway (ICEGATE)

- Further, Consol manifests are also being filed by forwarders.
- The facility of 'round the clock' electronic filing of custom's documents for the clearance of goods is now available to 40 custom's EDI locations.
- There are also options for a document tracking system, which enables users to know the latest status of their document on the internet.
- CBEC has also launched E payment and online registration for Intellectual Property rights through this portal.
- Exporter/ Importer and CHA can also check their IEC and DEPB license status on this portal.
- The release advice and IGM data is transferred from one custom's house to another using this facility.

Cargo Clearance and IT

Indian Customs and Excise Electronic Commerce/Electronic Data Interchange Gateway (ICEGATE)

- The inter-agency data is automatically transferred by the system to the concerned agency.
- A round the clock helpdesk is also functional for facilitation of ICEGATE users.
- In order to ensure privacy, authenticity, integrity and reliability of the transactions, CBEC has introduced the public key infrastructure (PKI) technology popularly called the digital signature.
- The Licensed Certifying Authority (iCERT), established by CBEC makes available PKI to its trading partners and departmental staff.
- The CBEC is setting up of a Customs Data Warehouse (CDW) to store data which may be made available in a standard format for any enquiry/investigation or analysis, reporting, etc.



Cargo Clearance and IT

eTrade Initiatives

- It was felt however, that apart from automation of customs, other agencies involved in the trade process should also partake of the automation initiatives.
- In this context, the Ministry of Commerce and Industry (MoCI) has launched an '*eTrade*' initiative which is a special project for coordinating various trade-related automation programmes.
- This initiative was launched in 1997 on a pilot basis, focusing on only the auto sector in response to the problems generated by a lack of compatibility between different value added network operators (VAN) being used by large auto players to source inputs from component suppliers that are largely SMEs.
- The *eTrade initiative* could provide a common platform to all the operators. However, after the pilot phase, the project was extended in 2003 with a larger mandate.



Cargo Clearance and IT

eTrade Initiatives

- This included inter-agency coordination for facilitating e-filing and e-payment as per the international standards and if required, to undertake process re-engineering for obtaining inter-agency message formats in a compatible manner.
- The objective is to provide an electronic interface between various trade regulatory and facilitating agencies and the trading community so as to facilitate delivery of better services.



Cargo Clearance and IT

eTrade Initiatives

- The regulatory and facilitating agencies in this include several actors (as mentioned in Fig. 3) like customs, DGFT, RBI and export promotion organizations (EPOs) There are transport-related agencies involved like Indian Railways, various airlines, Airport Authority of India (AAI), Indian Port Authority (IPA), CONCOR and Directorate General of Commercial Intelligence and Statistics (DGCI&S).
- Then are the CHAs and trading community members who are also being served by the *eTrade* project. The following major areas are being addressed as a part of this project:

Dwell Time Data and Select Point in India (Period 2007-08)

	Stages	Actors and Automation		ACC, Sahar, Mumbai		Chennai Customs		Nhava Sheva (Mumbai)	
		Actors Involved	Status of Automation	Time Taken in hrs	% of total dwell time	Time Taken in hrs	% of total dwell time	Time Taken in hrs	% of total dwell time
1	IGM to Entry inwards	Carrier	Filing of IGM to customs automated	0*	0*	0*	0*	0*	0*
2	Entry inwards to Submission of Bill of Entry by Importer	Importer/ CHA	Automated	79.05	47.78	163.45	51.01	181.52	52.61
3	Filing of B/E to Assessment	Customs	Automated	23.41	14.15	49.80	15.54	23.21	6.73
4	Assessment to Payment of Duty	Importer/ CHA	Manual and automated option	48.13	29.09	65.45	20.43	90.10	26.12
5	Payment of Duty to Goods Registration	Importer/ CHA/Bank/Oct roi	Partially Automated	1.18	0.71	22.20	6.93	48.17	13.96
6	Goods Registration to Out of Charge	Customs	Examination is a physical exercise but recording it is an automated process	13.68	8.27	19.54	6.10	2.00	0.58
7	Entry inwards to Out of Charge	Port/customs/	Not automated	165.45	100.00	320.44	100.00	345.00	100.00

* Earlier IGM used to be filed after arrival of the vessel and only then B/E could be filed. This was adding to the dwell time. As per amendment to Section 30 in 2003, IGM is now required to be filed before the arrival of the vessel. Hence, the dwell time attributable to IGM filing has become nil.

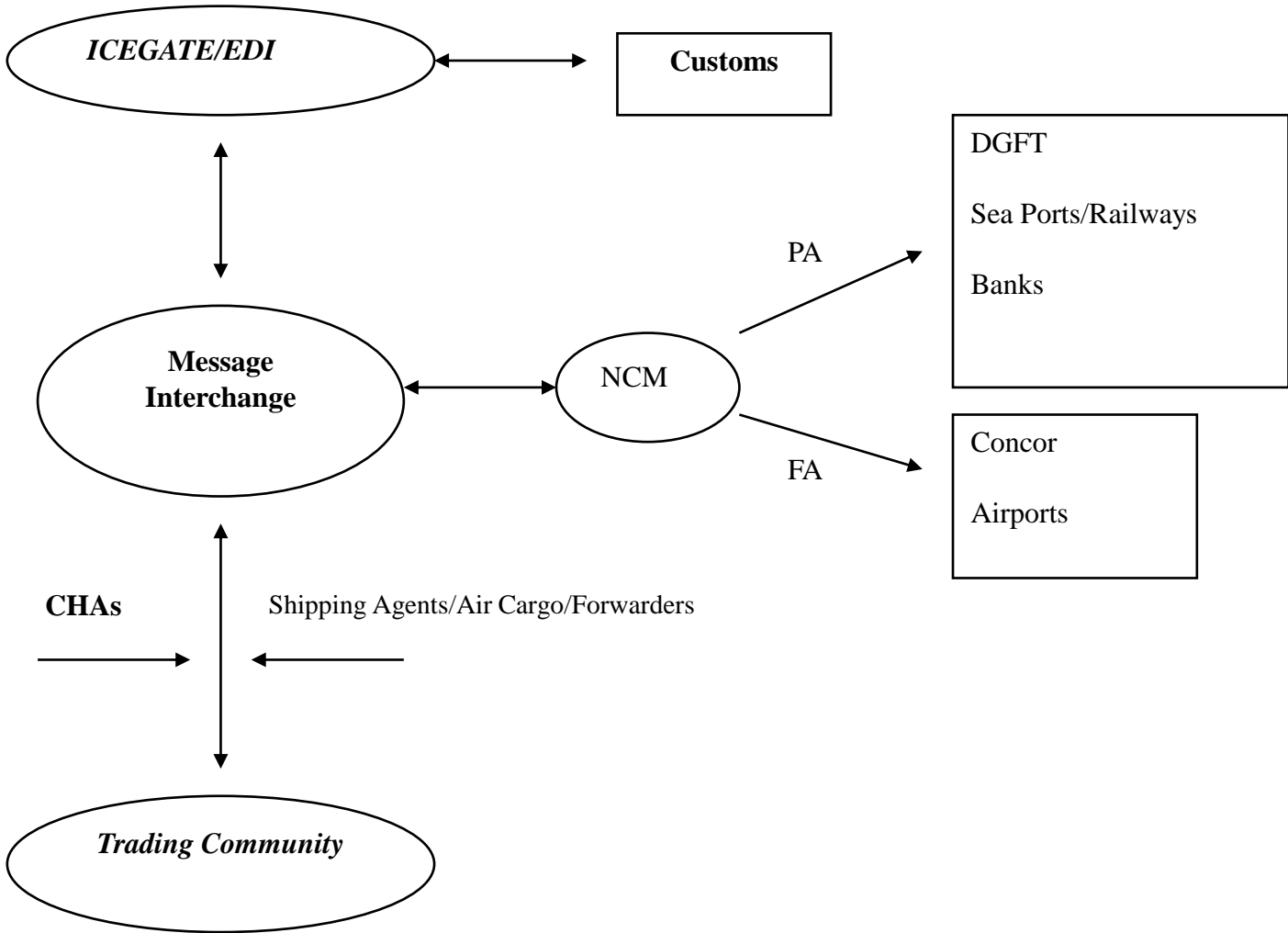
Source: Based on personal communication of the author with the Systems Unit of Customs Department.

Dwell Time

- It takes a total dwell time of 345 hours at Nhava Sheva, Mumbai Port and 320 hours at Chennai Customs and 165 hours at ACC, Sahar, Mumbai.
- The customs' procedures comprising of steps 3 and 6 namely, Filing of Bill of Entry to Assessment and Goods Registration to Out of Charge accounts for 7.31 per cent of this total time at Nhava Sheva 22.42 per cent at ACC, Sahar and 21.64 per cent at Chennai.
- This huge difference in performance at various customs stations is due to various factors.
- While performance at Nhava Sheva has improved tremendously due to the introduction of RMS, as a result of which much lesser amount of cargo is to be examined, at Sahar (which is an air cargo point) it takes longer as a larger quantity of consignment is to be physical examined which leads to the delay.
- The nature of goods at Sahar is also a contributory factor as it involves high value critical items for which no customs officer would like to take risk.
- Another important reason for delay is the limited capacity of the customs server.



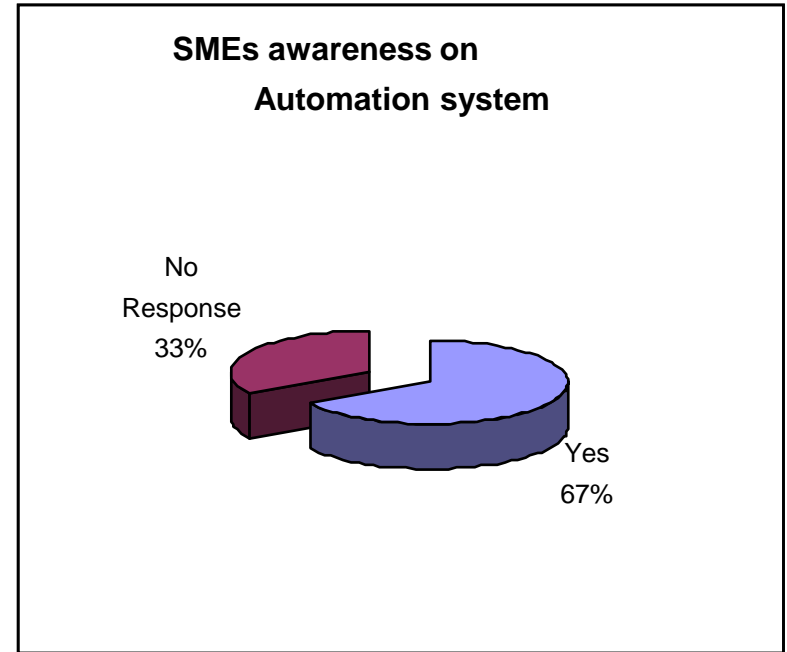
Cargo Clearance and IT



Notes: FA: Fully Automated; PA: Partially Automated; NCM: Non-Customs Messages

Survey Results

- Contacted 46 SMEs out of which 31 responded and we interviewed 23. It is worth noting that almost all the firms (Annex 2) whom we contacted have denied direct filing of customs documents.
- Most continue to depend on the customs house agents despite the fact that some of them were aware of the launching of initiatives like ICEGATE.
- * According to 67 per cent of the SMEs interviewed, there exists an awareness of the advantages of EDI and even of the risk management system but they feel that they can not handle and only CHAs can do it



Survey Results

- One of the reasons given by most was the complication inherent in the process as it was only partially computerized and automated. This required the carrying of papers to various offices for clearance and the release of cargo.
- When we enquired further most of them felt that classification of goods and the time required for the same are two important challenges to SMEs for which reason they would prefer to outsource work to CHAs.
- In their view, the work at customs and cargo clearance is largely something that only CHAs can handle.
- Many of them are of the opinion that, the cost of operations has increased since the introduction of various automation initiatives.
- The CHAs charge private companies an additional amount for electronic filing on the basis of per document filed.
- In the survey, only 33 per cent of SMEs were not aware of the new changes introduced in the cargo clearance. Most of the SMEs were of the view that it is not economical for them to file their own documents as it requires specialised knowledge and is time consuming.

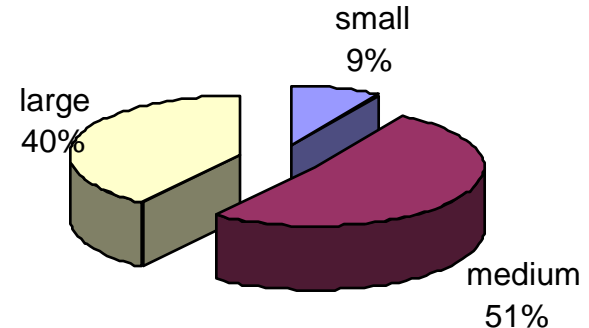
Survey Results

- One of the SME in New Delhi pointed out that very little value is attached to the importance of SMEs in the trade sector despite their high contribution.
- Thus while the recent introduction of an accredited clients programme (ACP) has improved dwell time and has quickened the cargo clearance process, somehow the provisions of ACP keep SMEs out of its purview.
- The ACP programme is structured more in favour of large companies whose value of imported goods is more than Rs. 100 million (USD 2.25 million)
- While the maximum limit to qualify in the SME (MSM) category is Rs. 100 million (USD 2.25 million) or payment of customs duty of more than Rs. 10 million (USD 0.22 million).
- Hardly any of the SMEs attain in even two consecutive financial years.

CHA Survey: Focus on SMEs

- Most of the CHAs, freight forwarders and shipping agents covered in the survey have predominant dealings with large and medium sized firms while there are very few who do not deal with large firms but focus on medium and small firms.
- 40 per cent have an exclusive focus on large firms, 51 per cent on medium-sized firms which form the focus of the current study and 9 per cent deal with small-sized companies.
- Due to enhanced transactions, it is not a matter of surprise that nearly all of them lodge customs declarations almost everyday.

Firm focus of CHAs, Freight Forwarders and Shipping Agents



CHA Survey: Focus on SMEs

- In India, 96 per cent of import documents and 94 per cent of export documents are filed through the EDI system.
- According to the CHAs and others, most of their clients including SMEs are aware of the possibility of lodging customs declaration electronically.
- Sizeable number of the companies whom we interviewed have denied any knowledge of increasing automation of trade procedures.
- The lodgment fee does not depend on the size of the firm or industry but on the size of shipment.

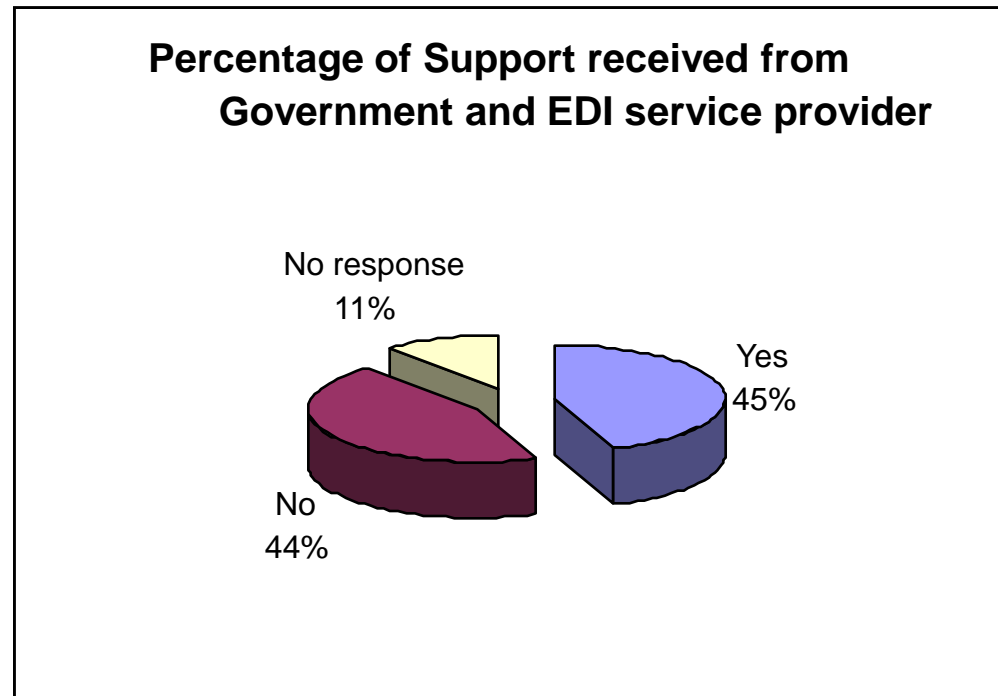
CHA Survey: Level of Automation

- In the questionnaire, we asked CHAs to rate India's trade automation programme. It is interesting to note that most of the CHAs have placed the level of automation of the export-import procedures in the range of 50 per cent to 100 per cent.
- During further interviews, they explained that there are several agencies which are either not automatised or their programmes are not compatible with customs.
- These agencies include Plant & Quarantine Office (PQO), Central Food Laboratories, Additional Drug Controller (ADC), WLRO, Textile Committee, respective municipal corporations, stamp authorities, Directorate General Foreign Trade (DGFT) and APEDA.
- Most of the CHAs have indicated that there is almost no electronic linkage between these agencies.
- The DGFT issues import licenses under various schemes such as Export Promotion Capital Goods Scheme (EPCG), Duty Free Credit Entitlement Certificate (DFCEC), Standard Financial Information Structure (SFIS) and Duty Entitlement Pass Book Scheme (DEPB), etc. which may be made available for online debit.
- This would reduce the threat of forged licenses and may also help in communicating necessary instructions for shipments and import at the ports.
- If complete automation is achieved, most of the respondents have suggested that almost all the agencies would benefit.
- There would be greater transparency, better and faster communication and speedy movement of cargo clearance.

CHA Survey: Level of Automation

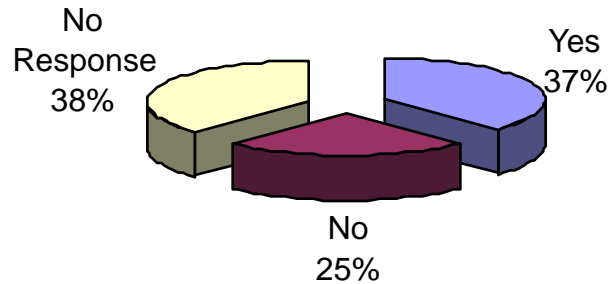
- Most of the CHAs and shipping lines have invested in organising their staff (training and IT orientation), adding additional equipments and establishing high end connectivity at their offices.
- Most of the CHAs have their own work stations from which they can expedite declarations electronically and can also track cargo movements and communicate with their clients.
- However, most of them are silent on the cost of these additions. In the transition phase, most of the CHAs faced the following problems namely:
 - (a) changing the mindset of work force,
 - (b) frequent break down in electric supply,
 - (c) break down of customs server and interruptions in electronic connectivity.
- Some of the CHAs also stated that there are instances when customs servers have crashed for a longer period of time affecting huge transactions.
- 45 per cent of CHAs have pointed out that they have received support from EDI service providers and government agencies in terms of software (while hardware was their own expenditure) at the offices of CHAs. The support was also for training of personnel and for frequent updates on softwares, while 44 per cent of CHAs have mentioned that there is no support from the government.

CHA Survey: Level of Automation



- Almost 11 per cent have not responded. It seems that the leading CHAs in 1995 got the initial support for automation and connectivity while the late comers in the profession were extended only free software for filing of documents. This may be one explanation for the divided opinion among CHAs.

**Increase in SMEs
Participation in Trade since the
launching of Automation of Systems**



CHA Survey: Impact on SMEs

- There is great convergence in the views of almost all the CHAs and shipping line agents that automation has increased the participation of SMEs in the trade process, although it seems that CHAs have only been marginally affected (-if at all-) as most SMEs still rely on CHA services.
- In the survey, most of the CHAs did not respond to the section that related to benefits and cost of automation.
- However, 37 per cent admitted that SMEs are positively affected by this programme, though 25 per cent have negated this view .

Special Case Study: Pithampura

- * In a special economic zone, it is expected that trade facilitating services are structured with utmost proficiency and in such a way that the traders do not have to approach to different agencies for necessary clearances. It was with this objective that we thought of undertaking a special case study of India's first Greenfield SEZ at Pithampur in Madhya Pradesh.



Special Case Study: Pithampura

- The Pithampur SEZ is spread over 17 acres of land given by MPAKVN
- Almost 72 firms exporting Rs. 9540 million (USD 214 million)
- Container Corporation of India's Pithampur inland container depot (ICD), has shown an increase in the throughput from 25,568 TEUs in 2005-06 to 27,384 TEUs in 2006-07.
- The air cargo exports crossed the 5,000-tonne mark for the first time, with total exports increasing by 19 per cent from 4,542.4 tonnes in 2005-06 to 5,404.2 tonnes in the same period.
- The impact on the revenue front was equally interesting. The collections in 2006-07 surged by 25 per cent to (Rs. 444.7 million) USD 9.96 million, from Rs. 356 million (USD 7.97 million) in 2005-06.

Special Case Study: Pithampura

- In the recent past, adequate infrastructure has come up to support expanding trade linkages. Offices of CHAs and almost 50 shipping lines with container facilities and FCL services by road and train to gateway ports have come up in a major way.
- There are two private ICDs operating in Pithampur, viz. M/S Al Cargo and PICASO.
- Some of the companies are doing extremely well in terms of developing diversified export destinations. For instance, Shakti Pumps India Ltd. exports to 52 destinations and has in record time completed the setting up of a 200,000 pumps manufacturing plant at SEZ, Pithampur.

Special Case Study: Pithampura

- During our field visit, we found that though industry turnover and export from the SEZ has expanded at an exponential growth rate, however, the trading community is least aware of any trade facilitation-related programmes particularly, measures related to automation.
- Out of the 12 company representatives (out of which 8 were SMEs), none were aware of the eTrade Initiative.
- All the companies, who attended the meeting, operate through CHAs and did not know that they could file export and import documents from their premises.
- They had never accessed EDI/ICEGATE online options.
- Though, all the facilities in SEZ are under one roof, still dependence on CHAs was largely due to lack of information and limited awareness of the initiatives from the Customs Department and the trade automation programme by the Ministry of Commerce and Industry (MoCI).

Special Case Study: Pithampura

- In Pithampur, the hardware installed for automation is quite dated and after being declared as obsolete was removed from Mumbai.
- The server is extremely slow. Many CHAs fill up the forms manually.
- The network does not include any other peripheral agency except CONCOR, with which some issues are pending for long.
- There are five kinds of messages to be exchanged between the Customs and CONCOR, but on three major messages related to shipping bill, let export order and entry of goods, there is no compatibility, which requires automatised process to be backed by hard copy of the documents which traders have to carry to the relevant officers across different agencies.
- The Ministry of Commerce and Industry in the eTrade initiative meeting of 28 May, 2008 had instructed Customs and CONCOR to decide on compatibility for message formats by 31 July, 2008, for Pithampur and a few other places, but this has not happened so far.
- The local industry has strongly requested that MoCI should organise trade facilitation-related industry capacity building seminars for making the industry aware of various automation-related programmes.

Way Forward

- * As has emerged from the paper, India has launched several initiatives for the automation of various trade facilitating components. The process spearheaded by the customs department and duly supplemented by other agencies like Concor is yielding significant results for the trading community.
- Gains from these advancements are not equally distributed among the traders. The bigger companies with adequate resources and sufficient maneuvering ability to adapt to new situations are likely to have greater returns with the automation programme as unleashed by the current trade facilitation programmes.
- SMEs have to spend a large amount of time and resources in grasping the new changes.
- This dissuades many firms from undertaking new possibilities offered by the TF measures.

Way Forward

- * It is interesting to find that, despite the automation drive by the customs department and other frontline agencies, the SMEs prefer to rely on customs house agents (CHAs) for their customs-related operations.
- One reason for this is that they find the costs in terms of manpower requirement and time - and to some extent electronic infrastructure - too high since full automation and one-time submission are not in place.
- Another reason is that SMEs believe that they lack the specialized knowledge to file their own documents efficiently.

Way Forward

- In our survey we found that only two-three per cent of firms have switched back from CHAs for handling of their trade procedural formalities.
- Many SMEs have identified factors such as lack of knowledge of computation of goods, lack of information of various notifications, issued by various agencies apart from several hassles related to non-compatibility of software programmes among various agencies.
- The changing tariff structure has also been listed as one among the factors responsible for continuous dependence on CHAs.
- The practical situation has not changed as agencies require physical verification at which point, again traders prefer to rely on CHAs and want to be out of the procedural chain.
- In this situation, CHAs seems to be the most practical special purpose vehicle for the trading community as they know best how cargo clearance is to be ensured in a limited time frame.

Way Forward

- * The following steps may be considered for improving the situation:
 - Automation at the Ground Level
 - SME Friendly Legislations
 - Making Tariff Classification known atleast of goods from SMEs
 - Inter-Agency Automation Linkage
 - Replacing Obsolete Machines