DOMESTIC POLICY CONSTRAINTS FOR EXPORTS IN SELECT SECTORS

- MAIN REPORT

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This Study has been undertaken by Export-Import Bank of India (EXIM Bank) in collaboration with a Team comprising Dr. Harsha Vardhana Singh, Former Deputy Director General, World Trade Organization; Mr. Rajeev Kher, Distinguished Fellow, RIS; Dr. Jayant Dasgupta, Former Ambassador of India to the WTO; Dr. Veena Jha, Former Head of UNCTAD India; and Mr. T.S.Vishwanath, Principal Adviser with APJ-SLG Law Offices.

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CHAPTER

INTRODUCTION

The four major engines of the Indian economy - private investment, exports, private consumption and public investment - have suffered significantly, leading to the downward revision of India's economic growth and dampened economic sentiments. GDP growth has been slowing and the crucial automobile sector is hurting. The lack of fiscal manoeuvrability, serious concerns around unemployment and a stubborn low investment in the private sector - these are among a slew of challenges facing the Indian economy. Merchandise exports from April 2019 to February 2020 were estimated at about USD 293 billion, a level -1.5% below the merchandise exports in the corresponding period for 2018-2019.[1] Since 2011-12, merchandise exports of India have been around USD 300 billion, with lows of about USD 262 billion and USD 276 billion respectively during 2015-16 and 2016-17, and a high point of USD 330 billion in 2018-19. Even with the highest merchandise export level in 2018-19, the year recorded the second-highest trade deficit since independence (see Table 1.1).

Table 1.1: India's merchandise exports, imports and trade deficit, 2004-05 onwards

Financial Year	Exports USD billion	Imports USD billion	Trade Deficit USD billion
2004-05	83.5	107.1	-23.6
2005-06	103	129.6	-26.6
2006-07	126.4	183.7	-59.3
2007-08	163.1	251.6	-88.5
2008-09	185.2	303.3	-118.4
2009-10	178.7	288.3	-109.6
2010-11	249.8	369.7	-119.9
2011-12	305.9	489.3	-183.3
2012-13	300.4	490.7	-190.3
2013-14	314.4	450.1	-135.7
2014-15	310.3	447.9	-137.6
2015-16	262.2	381	-118.7
2016-17	275.8	384.3	-108.5
2017-18	303.5	465.5	-162
2018-19	330	514	-184
2019-20 (April-February)	292.9	436	-143.1

Source: Department of Commerce Export – Import Database, and
https://commerce.gov.in/writereaddata/UploadedFile/MOC_637197184819765597_QUICK_ESTIMATES_Feb_2020.pdf

[1] https://commerce.gov.in/writereaddata/UploadedFile/MOC_637197184819765597_QUICK_ESTIMATES_Feb_2020.pdf

The current Coronavirus pandemic has created an extremely difficult and tenuous situation for international trade, with lockdown in several nations, large disruptions in Global Value Chains (GVC), and expectations of a long period of great effort needed to control COVID-19. The Governments, including the Government of India, are taking very strong measures in this regard and the focus at present rightly has to be on creating a healthy situation for nations. While international trade is a tool for improving economic opportunities, it is itself impacted by the overall operational conditions created by policies and international emergencies. The present crisis is likely to result in more inward-looking economies as well as efforts to seek alternative locations for GVCs instead of relying on one major source for it.[2] Looking a few years ahead, when several nations would be seeking international investments to achieve higher exports and growth, policies must be conceptualised and/or implemented in the near term for improving export performance in a major way. Experience shows that this would require a focus on encouraging export hubs. India has begun to take significant steps in this direction with some major schemes announced for electronics (with a focus on mobile phones), drugs/pharmaceuticals and medical devices.[3]

India, the world's second most populous country, is home to over 470 million workers. It will have the world's largest workforce by 2027- 1 billion.[4] Creating jobs is critical, even as the ground reality remains grim. The unemployment rate in India averaged 7.34% from 2018 until 2020, reaching an all-time high of 8.20% in August 2019 and a record low of 6.70% in November 2018.[5]

Over both, the short and long term, there are several domestic constraints to employment creation. The manufacturing sector accounts for just 18% of the GDP even as its labour intensity is declining. In organised manufacturing, labour intensity has declined from 1.45 in the 1980s to less than 0.33 over the last decade. With rising automation, this will only get worse. Even exports by labour-intensive sectors such as textiles, leather, gems and jewellery, which used to account for more than half of India's exports 15 years ago, have been declining. Now, capital-intensive categories such as engineering goods and automobiles account for 60-70% of exports. The Government must prioritise and incentivise manufacturing and remove policy bottlenecks while helping exports become globally competitive.

Against this background, this report closely analyses the constraints arising from domestic policy and other factors on certain selected sectors. These include pharmaceuticals, auto components and automobiles, textiles and clothing[6] (TnC), electronics with a focus on mobile handsets, and gems and jewellery (GnJ) sectors. The approach and methodology for the report have been detailed in Section 1. Section 2 summarises the results of a modelling methodology. Section 3 presents the main results from interviews. Finally, the conclusions of the chapter summarise the preliminary issues and show the way forward.

[2] For example, Japan has already intensified its efforts to invite four other economies to become members of the Comprehensive and Progressive Trans Pacific Partnership (CPTPP) trade agreement.
[3] Please see the press releases at https://pib.gov.in/allrelease.aspx. The schemes are notified under the sections on Ministry of Chemicals and Fertilisers, and the Ministry of Electronics and IT.
[4] https://economictimes.indiatimes.com/news/economy/top-five-economic-issues-that-the-new-Government-must-prioritise/article-show/69498185.cms?from=mdr
[5] https://tradingeconomics.com/india/unemployment-rate
[6] Clothing has been used interchangeably with Apparel and Garments in this Report

1.1 Conceptual Framework

A number of different factors determine the appropriate policies for removing obstacles to exports. The conceptual framework includes:

1. Export promoting domestic policies;
2. Prioritisation of domestic policies for exports, based on criteria such as:
    a. High priority policies: Policies which have a large impact and can be implemented within a short time period;
    b. Horizontal policies (improving operations of multiple sectors): These must be given high priority;
    c. Low hanging fruits: These are (i) policies that can be implemented quickly, (ii) policies which are already being implemented but can be improved quickly, (iii) policies that have already been identified by Government committees or advisory bodies which could be implemented quickly;
    d. A focus on policy measures that have a significant impact on competitiveness of exporters by:
        i. Reducing their cost of operations;
        ii. Reducing response time in a supply chain context;
        iii. Improving their capacity to meet relevant standards
3. Recognition of the fact that different policies may be required for large/small firms, or for foreign/domestic firms;
4. Recognition that the process of policy formulation or improvement should be based on information from, and interaction between, both exporters and the Government;
5. Understanding that a combination of two or more policies may need to be implemented together to increase the impact of each policy;
6. Prioritisation of effective implementation, comprising three parts,
    a. Effective co-ordination among Centre-State, or among Departments or Ministries of the Central Government;
    b. Use of a Management Information System (MIS) to monitor and address delays in policy implementation;
    c. An effective mechanism for getting feedback from exporters within a framework consistent with the MIS system
7. Quick customs clearance and turnaround of processed intermediate products, as well as good product quality consistent with different parts of the GVC, is essential to create export hubs. These processes facilitate connections with GVCs, and improve the competitiveness of the domestic industry. For this, in addition to policy support, connecting with institutions and training that helps improve process or product quality is essential.

The Government has made considerable progress on a number of the points mentioned in the conceptual framework, including establishing Committees for inter-Ministerial coordination. Nonetheless, performance is below par for an economy which aims to reach USD 5 trillion by 2025, with aggregate exports of USD 1 trillion.[7] Though India has improved its ranking on various indices, the country's export performance is not reassuring to policy makers and the industry. India is the

[7] https://economictimes.indiatimes.com/news/economy/foreign-trade/indias-exports-need-to-contribute-usd-1-trillion-in-economy-piyush-goyal/articleshow/70470822.cms?from=mdr

fifth largest economy in the world, but globally ranks as the 19th largest merchandise exporter and the 8th largest exporter of commercial services. This is a large gap and reflects underused economic potential, an obvious area for improvement.

1.2 Criteria used for selection of sectors

Two broad criteria were used to determine which sectors were selected: the feasibility of export promotion for the sector and its potential to develop into an export hub. Table 1 shows the top 20 merchandise export products between April 2018 to July 2019 which account for about two-thirds of total exports. A selected number of key items from this list was covered, based on the criteria specified below.

Table 1.2: India's merchandise exports, imports and trade deficit, 2004-05 onwards

Rank	Top 20 Export Products Apr-July 2019	Top 20 Export Products Apr 2018-March 2019
1	Petroleum Products (13.83%)	Petroleum Products (14.1%)
2	**Pearl, Precs, Semiprecs Stones (6.84%)**	**Pearl, Precs, Semiprecs Stones (7.87%)**
3	**Drug Formulations, Biologicals (4.82%)**	**Drug Formulations, Biologicals (4.36%)**
4	Gold and Other Precs Metl Jewellery (4.13%)	**Gold and Other Precs Metl Jewellery (3.92%)**
5	Organic Chemicals (2.88%)	Iron and Steel (2.95%)
6	**RMG Cotton Incl Accessories (2.84%)**	Organic Chemicals (2.83%)
7	Electric Machinery and Equipment (2.66%)	**RMG Cotton Incl Accessories (2.63%)**
8	Iron and Steel (2.62%)	**Motor vehicles/Cars (2.58%)**
9	Ship, Boat and Floating Structures (2.54%)	Electric Machinery and Equipment (2.55%)
10	**Motor vehicles/Cars (2.44%)**	Products of Iron and Steel (2.20%)
11	Products of Iron and Steel (2.13%)	Marine Products (2.06%)
12	Marine Products (1.98%)	**Cotton Fabrics, Madeups etc. (1.80%)**
13	**Cotton Fabrics, Madeups etc. (1.86%)**	Industrl Machinery for Dairy etc. (1.78%)
14	Residual Chemical and Allied Products (1.86%)	**Autocomponents/Parts (1.75%)**
15	Industrl Machinery for Dairy etc. (1.69%)	Aluminm/Products of Aluminm (1.74%)
16	**Autocomponents/Parts (1.69%)**	Ship, Boat and Floating Structures (1.73%)
17	Aluminm/Products of Aluminm (1.49%)	Residual Chemicl and Allied Products (1.59%)
18	Rice – Basmati (1.46%)	**Manmade Yarn, Fabrics, Madeups (1.51%)**
19	**Manmade Yarn, Fabrics, Madeups (1.45%)**	Rice – Basmati (1.43%)
20	**Telecom Instruments (1.26%)**	Plastic Raw Materials (1.36%)

Source: DGCIS, Kolkata (https://commerce-app.gov.in/ftpa/comq.asp

Note: The highlighted products are those corresponding to the ones selected for this study.

The more detailed criteria for selecting the relevant sectors, are:

Employment-intensive sectors: NSS data show that among manufactured products (at NIC 2-digit level), **textiles and apparel** are the most employment-intensive sectors.

Sectors with a high share in total exports: For this criterion, the gems and jewellery sector has been selected.

"Superstar" sectors in the context of Make in India[8]: There are six of these, out of which two are services. The four manufacturing sectors are: auto, electronics system design and manufacturing, pharmaceuticals, and food processing. Three of these sectors have been selected.

Sectors with large export targets: Within the electronics sector, the National Policy on Electronics 2019 (NPE 2019)[9] has emphasised mobile production and exports. It has announced a target export level of USD 110 billion for mobile handsets in 2025, with a domestic production of USD 190 billion that year.[10] This envisages a jump in exports equivalent to about 66 times the present level. Likewise, a large export target was also announced for automotive parts and components and automobiles. The Automotive Mission Plan (2016-2026) announced a target of about 5.5 to 6 times the current export level.[11] The objective is to export 35% to 40% of the industry's output by 2026. This is a major export volume, as the automotive sector represents nearly half of India's manufacturing GDP.

Technology-intensive sectors: Of the above, the three "superstar sectors" are technology-intensive and evolving in major ways: mobile phones, automotive parts/components and automobiles, and pharmaceuticals. It is noteworthy that the mobile phone and components sector would, through the smartphone, have a large impact on the spread of technology within India's population.

Sectors combining technological intensity, high domestic content and increasing options across value chains: Among these technology intensive sectors, the automotive parts and components sector has certain characteristics which show a potential for higher exports and rising dynamic advantages and opportunities. The automotive sector has very high localisation levels (85% to 95%)[12], which implies that most of the Indian automotive products are largely composed of domestically produced parts and components. Further, the automotive parts and components sector is increasingly integrating up the value chains and evolving into a supplier for adjacent industries in India, such as aerospace, defence, and agricultural machinery.[13]

SELECTED SECTORS: Based on the above criteria, the report focuses on: textiles and clothing; gems and jewellery; mobile phones, parts and components; pharmaceuticals, and automotive parts and components. Since the demand for automotive parts and components is significantly derived demand from the vehicles sector, policies affecting exports of vehicles are also examined.

1.3. Methodology

The methodology was composed of the following parts:

Preparatory phase: literature survey

Preparatory phase: testing of questionnaires

[8] http://www.makeinindia.com/six-superstar-sectors-boosting-make-in-india
[9] https://meity.gov.in/writereaddata/files/Notification_NPE2019_dated25.02.2019.pdf
[10] See paragraph 4.1 of the NPE 2019.
[11] See http://www.siamindia.com/uploads/filemanager/47AUTOMOTIVEMISSIONPLAN.pdf
[12] See page 6 of
https://www.mckinsey.com/~/media/McKinsey/Featured%20Insights/Asia%20Pacific/The%20auto%20component%20industry%20in%20India%20preparing%20for%20the%20future/ACMA%20Vertical_Onscreen_Final.ashx
[13] Page 7, ibid.

Detailed Interaction: With Government and exporters from selected sectors and lead firms on policy obstacles, gaps, helpful policies and feedback mechanisms

Prior experience from a previous large project based on questionnaires addressing export promotion organisations and individual exporters (both small and large), suggests that the most meaningful insights come from interacting first with export promotion organisations and then, based on the responses, following up with individual exporting firms. The questionnaires focused on policy obstacles, gaps (problems due to "commission and omission" of policies), helpful policies, framework to monitor policy impact, and feedback mechanisms from the exporters. In addition to the feedback, such an exercise could be used by the Government to periodically assess:

(a) The progress made in addressing the relevant policy constraints including, in particular, the priority areas of concern;
(b) The policy constraints which take too long to be addressed;
(c) Suggestions on steps required to achieve quicker resolution of problems that are proving difficult to address.

The available information on these aspects has been provided in the report.

More Than One Interaction-A double loop with key stakeholders: More than one discussion was held with some of the key stakeholders, including the Government, lead firms, and export promotion firms which needed to be approached again to clarify certain issues.

Econometric Analysis-An application of econometric methods to get deeper insights: Some common policy concerns have been identified by all sectors. The possible impact of reducing these policy obstacles has been estimated using a general equilibrium model called the Global Trade Analysis Program (GTAP).

Two Reports: Based on the various methodologies discussed above, two reports have been prepared, one on the sectors selected in general (i.e. this report), and another on export hubs.

1.4 Estimating the effects of some domestic policy concerns highlighted by exporters -A modelling exercise

Some of the issues identified by the report relate to the ease of doing business and will need long-term redressal. It is also difficult to monetise all these issues. Two issues which can be easily monetised and modelled are GST and tariffs using the GTAP model. Moreover, in a cash-strapped economy such as India, the revenue implications of reducing tariffs also need to be examined. The GTAP model using an input-output analysis also helps estimate the revenue impact of the policies being advocated here.

1.4.1 General Equilibrium Modelling exercise (the GTAP Model)

To conduct this exercise, the GST rates on all the products listed were tabulated first. This is shown in Annex 1.1 to this chapter. To estimate the effects of immediate refunds of GST on exports, the model assumes that GST rates are reduced to 0. This simulation shows the effects of an immediate refund of GST in selected sectors, on the economy as a whole (Table 1.2). The economy-wide effects would be

much higher if there was a quick refund of GST on all exports. A complete description of the model, its assumptions and sector classification are shown in Annex 1.2. In addition to estimating the impact of a quick GST refund, another exercise is done to estimate the impact of implementing zero tariffs on selected inputs for the sectors studied by the report.[14] The information on tariffs used in this exercise is shown in Annex 1.3.

Table 1.3: Economy-Wide Impact of Quick GST Refund and Zero Tariffs on Inputs for Selected Sectors

Category	Impact of Immediate GST Refund (%)	Impact of Tariff Reduction (%)
GDP	1.48	0.19
Exports	6.93	5.60
Imports	6.27	3.65
Employment	3.94	0.91
Investment	1.26	0.95

Source: GTAP Analysis

It is remarkable that by removing GST and tariffs only on these sectors, the economy wide effects are positive with a rise in overall exports by 7% and 6% respectively with immediate GST refund and tariff reduction in selected inputs. This shows that the weightage of these sectors in overall exports is high. With an increase in exports due to quick refund of GST the imports also rise but these include the imports required for producing the exports themselves; further, the rise in exports is higher than that for imports. The relative impact of a decline in import tariff for inputs is smaller than GST. This is because the number of products covered by the GST exercise is larger than those covered by input tariff reduction (Compare Annex 1.1 and 1.3).

In both these scenarios, the Government would be concerned about revenue loss, particularly in the case of tariff. The loss in tariff revenue due to zero tariffs on inputs as estimated by the model was USD 389 million. In the GST scenario, since the tax had to be rebated in any case, there is no revenue loss. The gain in the exports using 2019-2020 as the base, however, would be nearly USD 18 billion. Even accounting for the fact that the model is a static comparative one and does not account for dynamic changes, the overall gains in all circumstances would heavily outweigh the loss.

There are economy-wide GDP effects of an immediate refund of GST in selected sectors. The overall growth rate of the economy increases by nearly 1.5%, while exports and imports grow by nearly 7% and 6%, respectively. Further, employment increases by nearly 4% and investment by 1.3%. These are relatively large changes which reflect the importance of these sectors to the Indian economy. The multiplier effects of these sectors are very large as they contribute significantly to employment and investment. Most companies interviewed described an immediate refund of GST as a priority measure, and something that the Government's administrative machinery must be requested to do. This is also a 'low hanging fruit'.

[14] The products on which input tariff is reduced to zero, was provided by the industry stakeholders in this exercise.

1.4.2 Impact on selected sectors

The effects on the sectors selected in this report are much sharper than the overall impact on the economy. Even in these cases, the effects are uneven as they stem from the rate of GST applied to the sectors. The sectors which have higher GST rates will see more pronounced effects than those with lower rates. For the GST rates, see Annex 1.1.

Immediate GST removal on sectoral exports, output and employment

As Table 1.4 shows, the impact of an immediate GST refund would be overwhelmingly positive for exports from all sectors, with the highest effects in the gems and jewellery sector. Sectoral exports are estimated to increase significantly for automotive products and pharmaceuticals as well. A noteworthy feature is the relatively low estimate of the impact on exports of mobile phones, while the exporters of this sector have highlighted GST refund as a priority area of action. This implies that the GTAP results should be seen as the lower limit of the impact, with the likely effects being much higher. The reason for this is that the GTAP analysis does not take account of the operational problems and obstacles created by these policies, especially the time and effort required to address the GST issues, is not adequately captured by the price and supply elasticities inherent in the GTAP model.

Table 1.4: Effect of Immediate Refund of GST for Selected Sectors (%)

	Pharmaceuticals	Automotive Products	Textiles and Apparel	Gems and Jewellery	Mobile Phones
Sectoral Output	7.85	7.07	17.89	13.59	12.47
Sectoral Employment	16.24	19.22	3.75	22.34	2.46
Sectoral Exports	7.01	10.65	3.94	12.05	2.70

Source: GTAP Analysis

Hence, an immediate refund would help these sectors substantially and improve the achievement of national objectives reflected in Table 1.4 above. For example, in the case of mobile phones, and textiles and apparel, the estimated impact on sectoral output is high, while the employment effect is high for pharmaceuticals, automotive products, and gems and jewellery. As mentioned above with regard to the exports of mobile phones, the estimated impact of immediate GST refund in Table 1.4 should be considered as the lower limit, with the actual effect being higher. Furthermore, backed by the new schemes announced by the Government, the aspiration is to achieve mobile phones exports of USD 110 billion by 2025. With such an increase in exports, the efficiency provided by quick GST refunds would contribute to a large absolute increase in exports, output and employment, even with a small proportionate impact.

In textiles and garments, the effects on output are very large, while exports and employment are relatively small. This is partly explained by the fact that textiles and garments, for which most of the output is sold domestically, is totally backward integrated and is not significantly dependent on imports. The employment and investment effects are also positive. Hence, if the Government were to promote the immediate refund of GST on exports of the selected products there would be significant positive effects on the sectors.

Estimated impact of zero tariff on inputs on sectoral exports, output and employment

Annex 1.3 provides a list of the key inputs for which the effects of tariff removal are assessed. These products were identified by the interviews with producers in these sectors. Table 1.5 shows that reduction of tariffs on inputs to zero will have a very significant impact on exports across all sectors. For output and employment, however, the result is mixed, given the present operational conditions in different sectors. The impact on exports is high because a reduction in tariffs of key inputs improves the competitiveness of the products. A large part of the inputs of the automotive products and textiles and apparel are produced domestically, and the long experience of these sectors have made the domestic products cost-effective compared to imports. Thus, making imported inputs cheaper has a positive impact on output, employment and exports for the sectors, especially in the case of making import of manmade fibre (MMF) cheaper by applying zero tariffs on them.

For gems and jewellery, the ratio of exports to the domestic market is high, and imported inputs provide an important part of its value chain. Reducing the tariffs on these inputs to zero gives a boost to production in this employment-intensive sector, and also improves export competitiveness in a major way.

Table 1.5: Effect of Immediate Refund of GST for Selected Sectors (%)

	Pharmaceuticals	Automotive Products	Textiles and Apparel	Gems and Jewellery	Mobile Phones
Sectoral Output	-0.8	5.2	7.51	5.7	-5.16
Sectoral Employment	-0.07	28.4	39.32	28.7	-24.5
Sectoral Exports	20	34.3	32.3	27.05	30.5

Source: GTAP Analysis

For mobile phones and pharmaceuticals, the import share is high in domestic production/exports, and tariffs on imported inputs create conflicting incentives for domestic product and exports. For example, the phased manufacturing Programme (PMP) implemented through an increase in tariffs has resulted in domestic production of a number of input products. This production, developed under an import substitution strategy under a tariff regime, leads to cost-inefficient domestic production. Zero tariffs on inputs will reduce the domestic output of these products, but make exports more efficient. Thus, exports will increase, but domestic production and employment will decrease with zero tariffs on key inputs. A strategic approach has to be evolved so that any present emphasis on import substitution is adequately mitigated for exports through support and incentive/policies. The Government has recently announced such policies for this sector, as well as for certain drugs and medical devices sector.

1.5 Key factor affecting trade competitiveness often missing from the conventional major policy efforts

Two kinds of obstacles to exports were found through discussions with policy makers, industry/ exporters, and other stakeholders. One is an unusual issue of various transport related charges which are comparatively much higher than international norms. The other relates to policy related obstacles

for exports that are conventionally identified, e.g. Customs practices, delays in approval or payments, taxation or tariff related concerns, and other issues covered under the ease of doing business. The first issue is discussed in this section. The other issues are discussed in Section 1.6 and 1.7 below.

1.5.1 A concern which needs active policy intervention by the Government to reduce cost-escalation of India's traded goods

A significant portion of the transportation costs for import-export consignments sent by sea cargo For mobile phones and pharmaceuticals, the import share is high in domestic production/exports, and tariffs on imported inputs create conflicting incentives for domestic product and exports. For example, the phased manufacturing Programme (PMP) implemented through an increase in tariffs has resulted in domestic production of a number of input products. This production, developed under an import substitution strategy under a tariff regime, leads to cost-inefficient domestic production. Zero tariffs on inputs will reduce the domestic output of these products, but make exports more efficient. Thus, exports will increase, but domestic production and employment will decrease with zero tariffs on key inputs. A strategic approach has to be evolved so that any present emphasis on import substitution is adequately mitigated for exports through support and incentive/policies. The Government has recently announced such policies for this sector, as well as for certain drugs and medical devices sector.

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1.5.1 A concern which needs active policy intervention by the Government to reduce cost-escalation of India's traded goods

A significant portion of the transportation costs for import-export consignments sent by sea cargo comprises the charges paid to shipping lines for handling containers at the Indian port of entry/ dispatch. The amounts paid by a shipping line for different services to a given port authority are all billed to the shipper/consignee. If there are intermediaries in the form of a freight forwarder or a customs house agent, they add a mark-up at their end for each of the service charges, increasing the overall burden on the shipper/consignee. This burden is attached to the total cost despite minimal services provided to the shipper/ consignee. The Government's policy does not require the use of intermediaries and many large firms get the clearances on their own. It is necessary to improve facilitation that makes effective the digital method of transactions, so that a cost which is not envisaged in policy is not imposed on the smaller firms.

Indian ports charge additional amounts for myriad services, **even though most of these services**

are subsumed in the Terminal Handling Charges (THC) levied by the ports on the shipping lines for handling containers. For instance, the THC include charges for offloading/putting on board a container from a container yard or railway flatbed wagon to a ship or vice versa. Even then, some of the ports charge Inter Terminal Rail Handling Operations (ITRHO) on containers moved by rail. Similarly, extra charges are levied by some ports for the Direct Port Delivery (DPD) of inbound containers even though the DPD service involves less costs and time for the port authorities.

Normally, a free dwell time of four hours is allowed between the anchorage and berthing of a ship. If a container ship spends extra time at anchorage (on account of congestion at a port, shortage of pilots or some other reason) or if there is delay in offloading/loading containers after berthing, demurrage has to be paid by the shipper/consignee. If there is a delay in customs inspection after a container has been offloaded at a port, demurrage is again charged to the consignee even though the latter is not at fault. **These are examples of situations where additional costs are imposed on the exporter/importer while the reason for the delays and increased cost are attributable to the practices of those who charge the exporter/importer. For this reason, there is no incentive to be efficient and reduce the costs involved.**

Indian ports also levy heavy vessel handling charges (VHC), which get passed on to the shipper/consignee on a pro-rata basis for single containers. **Some Indian ports charge VHC at USD 55,000 to USD 80,000 per vessel, ostensibly to cover for their high dredging costs. But VH Charges for Colombo, Singapore and Shanghai are in the region of USD 7,000 to USD 12,000 only.[15]**

The rationale for high VHC, and the additional charges for different services, is not always clear to users. Exporters and importers feel that there is exploitative rent-seeking behaviour at different levels in the service delivery chain, leading to a significant cost burden on trade. The Tariff Authority for Major Ports, which hitherto fixed tariffs for different services provided at the 12 major ports in India, is likely to give way to individual ports for the same purpose under the recently introduced Major Ports Authority Bill, 2020.[16]

In their feedback, exporters felt that with increased transparency for the practices of ports, shipping lines and intermediaries for all the services rendered and the charges thereof, trade would benefit greatly. In addition, this would help carry out a comparison of the costs imposed on Indian international trade and analogous costs in other countries, so that steps could be taken to reduce such costs in order to add a substantial amount to the overall costs of Indian products in global markets.

1.6 Government has implemented several policies and initiatives to improve operational conditions

The Government has implemented many initiatives[17] at the Central, State and District levels.[18] These initiatives cover several areas-customs, infrastructure, logistics, co-ordinated systems for policy

[15] Based on a discussion with Department of Commerce officials
[16] Outlook The News Scroll, 12 February, 2020
[17] For specific examples, see CII's magazine, "Ease of Doing Business Watch", Volume 04, December 2019.
[18] See pages 56 to 59 of ibid.

approvals, strengthening dispute resolution, rationalising inspection mechanisms, digitisation of systems and document submission and so on.[19] In addition, the Government has established co-ordinating committees and nodal Ministries/Departments for specific initiatives. Examples of initiatives and agencies/ programmes with specific responsibilities include:

(a) Logistics - National Committee on Trade Facilitation (NCTF), Department of Commerce;
(b) Trade Facilitation -NCTF, Customs Clearance Facilitation Committee (CCFC), Logistics Databank, NCTF Secretariat to Co-ordinate with States;
(c) Ease of Doing Business - Including programmes such as Single Window Interface for Facilitating Trade (SWIFT)/ Reduced Documentation, integrated Risk management System (IRMS), Authorized Economic Operator (AEO), Direct Port Delivery (DPD), E-Sanchit, Digitization, 24*7 Customs Clearance, improved grievance redressal mechanisms, development of TFA Monitoring Tool, ascertaining of manpower requirements at each port, discussions on solutions for MSMEs;
(d) Co-ordination -For example, feedback received on the draft Standard Operating Procedures issued by the Department of Revenue for notifying new non-tariff measures or other import/ export restrictions/prohibitions by various Ministries/ Departments/Government Agencies after prior consultations with the Department of Revenue and Ministry of Commerce.

The National Committee on Trade Facilitation has established specific committees or working groups on important areas to add momentum to the process of improving operational conditions for industry/exporters. Examples of such groups and their main tasks include:

Working group on outreach: To increase outreach on TFA measures implemented, and draw up a report on feasibility of establishing a centralized system for enquiry points;

Working group on Partner Government Agency (PGA) non-tariff restrictions: Develop a mechanism to restrict notifications/ guidelines regarding NTMs; and develop a proposal for an electronic repository to maintain existing and future NTMs. This also helps to co-ordinate and develop consistency between policy actions;

Working group on legislative changes: Draw up a report on legislative changes in customs & other allied Acts;

Working group on infrastructure augmentation: Conduct gap analysis on infrastructure deficits at minor ports, Land Custom Stations (LCS)/ Integrated Check Posts (ICP) (particularly in the North-East, tier II Airports), and write up and Report on the measures required to establish laboratories at all ports;

Working group on Time Release Study (TRS): Report on outcomes of TRS and the way forward to ensure real-time tracking.

[19] One example of the reach of the initiatives in a coherent manner is given in https://pib.gov.in/newsite/printrelease.aspx?relid=149033 and http://www.cbic.gov.in/resources//htdocs-cbec/Updated-reforms-related-ease-dong-business-April.pdf;jsessionid=18351915CC93148175EB99245962A96B. The detailed Business Reform Action Plan (BRAP) has been implemented by the DPIIT, Government of India. See https://dipp.gov.in/sites/default/files/Implementation_Guide_2019_dated_04022019.pdf

The industry/ exporters have identified several policy-related concerns which remain a high priority for them. Many of these are raised in the NCTF,[20] some others are highlighted in other contexts. For instance, regarding ease of doing business, the industry has mentioned a number of problems such as ensuring effective implementation of business reforms, implementation of District Level Business Reform Action Plan (BRAP) reforms, decriminalization of laws, extension of legacy dispute resolution scheme to VAT, repealing archaic laws, rationalising the inspection mechanism, simplifying land acquisition and property registration, easing environmental compliance, reducing labour compliances, reducing the number of approvals required for establishing and starting a business, and many more.[21] The list of reforms suggested is even longer,[22] and the focus is on ease of doing business in general. These suggestions are useful for domestic operations, but a more focused approach is required for exports.

For exports, some concerns are of a generic nature (i.e. relevant for all sectors) and others specific to a sector. A comprehensive approach requires a consideration of individual priority sectors, and within that to identify those areas of policies which the industry/ exporters consider as major obstacles to be addressed to enable significant exports achievement. This is the approach taken in this Report.

1.7 Selected problems identified in each sector individually -Preliminary results from interviews

Membership of WTO Trade Facilitation Agreement (TFA) has resulted in a framework of policy which leads to improved operational conditions for international trade. However, there is an imbalance in the extent to which export facilitation takes place in comparison to import facilitation. Though the TFA covers both exports and imports, shortcomings in import facilitation are monitored more closely by other WTO members who are interested in their own exports getting the relevant facilitation services. For India's exports, the operational conditions within the country have to be monitored mainly by India and the stakeholders (Indian exporters) themselves.

The Government has made considerable efforts to improve the operational context for international trade. It is important to assess the extent to which these efforts have made an impact on the industry's operational efficiency and facilitated exports in particular. This exercise will become more meaningful and effective if policy intervention and focus is decided based on some tangible information on what is considered a priority area by the exporters.

In the feedback for preparing this Report, the stakeholders have identified a large number of policy-related concerns. Implementation of policies becomes difficult if the Government has to focus on a large number of issues across the board. From the long list of concerns, it is useful to identify those which are considered by exporters to be of greater importance. Two points are relevant in this context to improve effective policy implementation.

Some policies are important across various sectors, and it would be appropriate to address them in a systemic manner. Some policies are more sector-specific and a manageable shortlist of interventions

[20] For examples of the concerns raised in NCTF, see Chapter 7 of this Report.
[21] See for example, pages 44 to 46 of "Ease of Doing Business Watch", Volume 04, December 2019.
[22] See for example, http://ficci.in/spdocument/23167/FICCI-Pre-Budget-Memorandum-2020-21.pdf

need to be determined for them to make a focused effort to improve operational conditions. This Report which has examined the situation with six important sectors, three of which are the "superstar" sectors for Make in India, is a good basis for identifying common concerns, and priority areas of action for specific sectors.

The list of priority areas of concerns provides a basis for a more meaningful examination of policy implementation and make it effective through manageable monitoring and focused consultation exercise between the Government and the industry.

Common concerns: There are some common problems that have emerged from sector-specific domestic constraints to exports of products. These include:

High GST rate and refund delays. Sectors impacted include electronics with a focus on mobiles, automobiles and auto components, gems and jewellery and textiles and garments

Export incentives will be removed and need to be replaced. This specifically refers to merchandise exports from India (MEIS) scheme which would be removed from all sectors

Delays in approvals, which affects all sectors

Tariff reduction required for the removal of inverted duty structures in four of the five sectors

Improvement of customs clearance, which includes all sectors

Logistical difficulties, high for all sectors

Regulatory issues: Dealing with multiple agencies particularly affects the pharmaceuticals, auto, gems and jewelry sectors

Lack of effective implementation and identification of policy gaps, which covers all the five sectors

The Sections below provides information on sector-specific priority areas of policy-related concerns.

1.7.1 Labour-intensive exports: Gems and Jewellery and Textiles and Garments

Both gems and jewellery and textiles and garment industries are ranked high in terms of exports and labour intensity. Together the two accounted for roughly 25% of India's exports in 2019-2020 (estimates) and employed roughly 4.6 million and 49 million people, respectively. While their problems are different, customs and regulatory problems run across these sectors.

Textiles and Clothing

India's textiles sector is one of the oldest industries in the Indian economy, dating back several centuries. India's overall textile and clothing exports during FY 2018-19 stood at USD 36.6 billion. The output of Textiles and Clothing is currently estimated at around USD 200 billion, and expected to

reach USD 250 billion by 2023.[23]

In this industry, a number of exporters are not aware of all the subsidy regimes that could benefit them. In some cases, they find it difficult to correctly fill the required information in the relevant form or they make an error when seeking access to financial support under a scheme. Some also said that there are too many documents and that the processes are not easy. A number of exporters said that multiple windows had to be tapped for a single scheme. They prefer a single window for all the schemes, with an easier application form and simpler information requirements.

The stakeholders strongly advocated that a uniform GST should be levied across the entire textile value chain i.e. fibres to made-ups/clothing, which is not the case for manmade fibre textiles. For GST, especially state GST, it takes time to verify the Export General Manifest (EGM) details and carry out continuous follow-up. There are delays in getting new licenses, as the process is slow for the closure of Export Promotion Capital Goods (EPCG)/Advanced Authorisation licenses after submitting the Export Obligation Discharge Certificate (EODC). Another problem faced is that of administrative costs, which are exacerbated by the inability of the producer/exporter to manage the process digitally. Further, even when documents are submitted digitally, authorities often insist on their physical verification. If an error is made while filling in the form, it is not easy to correct it. This process is further complicated by the lack of a consistent database with the various authorities involved in the process of rebate, refund, or other specific forms of financial support available to exporters.

On the process of claiming GST, specific issues were raised regarding the GST portal. The earlier effort to establish GSTR-2 and GSTR-3 screens has been abandoned, and their replacements GSTR-2A and GSTR-3B are under development. Though improvements in IGST refund processes have now been made, exporters contended that IGST credits were difficult to obtain. Many also claimed that there had been delays in getting ROSL (refund of state levies) and duty drawback refunds. For the latter, significant problems were encountered in getting the EGM and making sure that the right details were entered on different portals. Manual intervention was often required to obtain scrips/GST refunds and middlemen had to be engaged, at some cost, to get the disbursements. Simplifying the processes would help the industry immensely.

Small firms complained that most shipping bills do not get uploaded to the DGFT server on time. In addition, the electronic Bank Realization Certificates (e-BRCs) for exporters were often not reflected on the DGFT server. The server was also frequently not working, which delayed uploading. The fact that errors once made in this process are difficult to correct, is a significant problem particularly for small firms. The small firms also emphasised that there should be a single window clearance, as the involvement of several agencies and Government departments created problems for them. Despite round-the-clock customs clearance on paper, the service is unavailable even in major ports because of staff shortage.[24]

At the time of clearance of goods an importer pays duty on CIF value of material, which also includes ocean freight. Thereafter, the importer again pays GST under Reverse Charge Mechanism (RCM) on ocean freight and deposits the tax with the Government. Thus, there is double taxation on Ocean

[23] https://www.investindia.gov.in/sector/textiles-apparel

[24] https://economictimes.indiatimes.com/news/economy/foreign-trade/govt-exporters-to-talk-customs-issues-today/article-show/69088703.cms?from=mdr

Freight, which may be exempted from payment of GST under RCM. Taxes should be reduced and documentation should be made simpler.

All the industry segments, especially weaving and processing, need to be modernised on an urgent basis. Even cotton spinning, which is considered to be world class[25], needs to be upgraded otherwise it risks becoming uncompetitive in a few years' time. The Amended Technology Upgradation Fund Scheme (ATUFS), and its predecessor schemes have provided significant benefits to the industry to modernise.[26] ATUFS should be continued and the allocation under it should be increased. Spinning should also be included in the ATUFS dispensation. However, in order to provide full benefits to the industry, ATUFS needs to be modified to: (a) raise the limits of Capital Investment Subsidy (CIS) for a single unit, (b) raise the percentage of CIS per unit, and (c) expedite the scrutiny of applications and inspection of installed machinery, which currently takes an inordinately long time.

The EPCG scheme is likely to be phased out shortly because of an adverse ruling by a WTO dispute settlement panel. Most of the spinning, weaving, processing and sewing machines needed by the industry are not manufactured in India. In order to facilitate modernisation of the industry in the absence of the EPCG scheme, the import tariffs of those machines, which are eligible for CIS under ATUFS, should be brought down to zero.

The Merchandise Exports from India Scheme (MEIS) is also likely to be completely phased out by 2020-21[27] in view of an adverse ruling by the same WTO dispute settlement panel. It is to be replaced by Remission of Duties and Taxes on Exported Products (RODTEP)[28]. Cotton yarn was not eligible for benefits under MEIS earlier. Also, fabric exports were eligible for 2% MEIS (unlike 4% available to made-ups and garment exporters) under MEIS. Rebate of State & Central Taxes and Levies (ROSCTL), which was introduced w.e.f. 7 March 2019[29], ostensibly as a replacement for MEIS, did not include either yarn or fabrics in its purview. The industry felt that RODTEP benefits should be available for both yarn and fabric exports to compensate for the unrebated state and central duties and taxes that these products suffer.

Barring spinning, all the other downstream segments of the industry in India suffer from a serious lack of scale. In order to encourage the production units to achieve global scales, artificial distinctions between SMEs and large units need to be done away with, especially in terms of power tariff subsidies, labour laws, inspections etc. Also, special incentives need to be provided for the consolidation of existing weaving, processing, made-ups and garment units for the achievement of scale.

In order to reduce transportation costs for raw materials/intermediate products and facilitate cluster development, a few mega textile parks or large Export Hubs need to be set up by states, where units from yarn to garments can be located.

[25] http://filcontrol.com/news/yarn-cotton-market-india/
[26] https://www.business-standard.com/article/economy-policy/amended-tufs-delivers-huge-benefits-across-entire-textile-value-chain-118080400451_1.html
[27] taxguru.in/dgft/insight-remission-duties-taxes-export-products-rodtep-scheme.html
[28] https://economictimes.indiatimes.com/news/economy/policy/finance-minister-announces-new-tax-refund-scheme-easy-credit-to-boost-exports/articleshow/71129550.cms?from=mdr
[29] http://www.cbic.gov.in/resources/htdocs-cbec/customs/cs-circulars/cs-circulars-2019/Circular-No-10-12032019.pdf;jsessionid=3DF-554F449E9C7492972EF957B66075F

Gems and Jewellery

India's Gems and Jewellery (GJ) sector is one of the largest in the world contributing 29% to global jewellery consumption. The market size of the sector is about USD 75 billion as of 2018 and is estimated to reach USD 100 billion by 2025. There are more than 300,000 producers, contributing about 7% to India's GDP and employing over 4.64 million employees.[30] Data compiled by the Gems and Jewellery Export Promotion Council (GJEPC) showed gross exports from India stood at USD 39.68 billion in 2018-19, compared to USD 40.96 billion in the previous year.[31]

Overall exports in this sector are estimated to have declined by 5-10% in the financial year 2019-2020 compared to 2018-19, on the back of US-China trade war, protests in Hong Kong and the implementation of VAT in the Middle East.[32] India is the world's largest centre for cut and polished diamonds, exporting 75% of the world's polished diamonds. Today, 14 out of 15 diamonds sold in the world are either polished or cut in India.[33]

India is also the largest consumer of gold in the world. A rising middle class population and increasing income levels are the key drivers of the demand for gold and other jewellery in India. Gold jewellery exports from India stood at USD 6.11 billion and imports at USD 32.8[34] billion between 2018 and 2019.

The Government has also permitted 100% Foreign Direct Investment (FDI) in the sector under the automatic route. The USD 35.77 billion household jewellery industry will probably receive a major boost through the Government's decision for FDI in retail. As of January 2018, the Reserve Bank of India (RBI) has increased the scope of the gold-monetisation scheme by allowing charitable institutions and Government entities to deposit gold, expected to boost deposits over the coming months.[35] However that has not happened so far.

In addition, silver jewellery, semi-precious stones and artificial jewellery are the growth sectors in international markets. India should promote the growth of this segment of its gems and jewellery base because its global market value stands at USD 7 billion.

The major reasons for the fall in domestic consumption and exports in this sector from 2019-2020 were reported to be credit crunch, delays in GST refunds, customs-related issues, and high import duties on polished diamonds as well as gold.[36] In order to make India an export hub of gems and jewellery, a survey of major export players and industry representatives was conducted to gather information about the problems that they face. These are briefly summarised below:

[30] https://www.ibef.org/industry/gems-and-Jewellery-presentation
[31] https://www.business-standard.com/article/economy-policy/credit-squeeze-gst-hiccups-dent-india-s-gems-and-Jewellery-exports-in-fy19-119041900635_1.html
[32] https://economictimes.indiatimes.com/industry/cons-products/fashion-/-cosmetics-/-jewellery/gems-jewellery-exports-may-decline-5-10-this-year-gjepc/articleshow/71632672.cm
[33] https://www.ibef.org/industry/gems-and-Jewellery-presentation
[34] https://m.economictimes.com/industry/cons-products/fashion-/-cosmetics-/-Jewellery/gold-imports-up-35-5-in-first-quarter/articleshow/70651759.cms
[35] https://www.ibef.org/industry/gems-and-Jewellery-presentation
[36] All these issues would be explained in detail below.

For the purchase of gems and jewellery over the value of Rs 2 lakh, the Government requires that the PAN card be quoted by the seller. PAN card holders do not comprise even 50% of India's population, and making it mandatory in this manner could cause problems especially in rural areas. The industry suggested that this limit be raised to Rs 5 lakhs for sale without a PAN card.

One of the reasons forwarded for the fall in diamond exports is the popularity of lab-grown diamond (LGD) vis-a-vis natural diamonds in international markets. This has affected the Indian diamond industry adversely, not only because it is based on natural diamonds, but also because LGDs are often passed off as natural diamonds. The industry suggested that certificates of authenticity for natural diamonds should be developed so that price premiums can be obtained on natural diamonds.

Gems and jewellery exports are also affected by international disturbances; this was happening even prior to the impact of COVID-19. Shipments to Hong Kong, that make for almost a third of India's exports in this sector, fell about 17% to USD 11.1 billion in the fiscal year 2020-2021 as the protracted trade war between the US and China sapped demand. The fall could deepen if protests in Hong Kong continue.[37] The industry suggested that markets should be diversified. After the COVID-19 experience, this would be among the necessary policy steps required for most sectors.

India failed to capitalise on the US-China trade war. The gems and jewellery industry was hoping that US President Donald Trump's decision to impose a 10% import duty on Chinese jewellery would help boost India's sagging exports of diamonds and jewellery made from precious or semi-precious stones to the US. However, there are no signs that Indian jewellery exports are being put on the fast track. India faces tough competition from Thailand and Vietnam, which have much friendlier business policies that take advantage of the US-China trade war.[38] Keeping this in mind, Indian policies should adjust to ground realities and the competition from Thailand and Vietnam.

When foreigners come to India to buy jewellery, transactions should be treated as exports and not as domestic purchases. They should be able to get duty refunds at the airport as is the practice in most places. There should be a common IuD HS classification code (Instruments, utilised for demonstration purposes in the Harmonised System of World Customs Organisation) between foreigners who come here, businesses, customs and agents that could make it easier for agents to export.

There is no mechanism to retain the money gained from exhibitions outside the country. The form "D" at Indian airports allows only a limited amount of currency and it is very difficult if the exchangeable amount is above USD 5,000. Mechanisms for this must be developed.

For silver jewellery, synthetic gemstones and cut stones, almost 80% of the raw material is imported from Thailand. These are not high valued items. The Government should set a reasonable minimum limit which removes customs clearance requirements for any amount beneath it. This will ease the business practices for small traders. For silver jewellery, out of total production, 30% is exported and 70% is used for domestic consumption. Out of the 30% that is exported, 80% is imported content. For the domestic consumption (which is bulk of the production), only 20% is imported content. This means that two-thirds of the imports are for exports. The Government should therefore consider facilitating its imports.

[37] https://www.livemint.com/market/commodities/hong-kong-unrest-is-worrying-india-s-jewelers-1567603224694.html
[38] https://www.nationalheraldindia.com/national/indian-gems-and-Jewellery-industry-fails-to-take-advantage-of-us-china-trade-war

Banks do not give a guarantee for import of rough diamonds in India, compelling exporters to use the supplier's credit. As a result, the GJEPC and big diamond producers have created a fund requesting the Government to participate in the generic promotion of diamonds imports via contributions to it. They require an amount of USD 2.3 billion from the Government to create this fund in order to improve credit availability for the diamond exporters. Exporters also feel the absence of any professional organisation or Government counter which would allow them to purchase raw materials.

It is comparatively easier to do business in Dubai than in India. The Congo sells all its consignments to Indian exporters through Dubai. As a result, it is getting difficult for the Indian Government to tax rough diamonds in India because they arrive directly through Dubai. In India, the carat tax is 125%, which is being avoided. It would be convenient if rough diamonds directly come to India by easing the bank loan conditions. Tariffs on products coming from Dubai are low as India has a free trade agreement with the UAE.

Transportation is the nerve-knot of this industry in India. Exporters are unable to fulfil the export demand of products due to transport problems. Trade logistics, especially transport costs need to be eased.

Ease of doing business is another problem. The clearance of parcels from customs and other formalities takes a lot of time, and after dispatch, the parcel reaches the foreign country within 5-6 days. To overcome this problem, exporters dispatch their parcels by air or DHL from Delhi and the parcel reaches the country concerned within one day. However, parcels of such high value items are not safe. Hence, both transport and customs clearance formalities should be eased.

Feedback from exporters suggests that the Government's efforts could begin by prioritising quick GST refunds, rationalisation of tariffs, and easing customs procedures.

1.7.2 Technology intensive sectors: Automotive sector, Electronics (especially mobile handsets and parts and components), and Pharmaceuticals

These sectors have begun to form an important part of India's export basket -currently at about 10% of India's export basket, their significance is expected to increase significantly. The cutting edge for these products is provided through technological upgradation, though their production in India is also characterised by assembly operation, a labour-intensive process that offers India an edge.

Automotive Sector

The automotive industry in India is the world's fourth largest, with the country currently being the world's fourth largest manufacturer of cars and seventh largest manufacturer of commercial vehicles in 2018. Overall, domestic automobiles sales increased at 6.71% CAGR between FY13-FY18 with 26.27 million vehicles being sold in FY19.[39] The auto components industry employs almost 50 lakh people and accounts for 2.3% of India's GDP. Currently, about 60% of components are taxed at GST rate of 18%, while the remaining high value parts attract a duty of 28%. The component sector seeks assistance by way of a uniform GST rate of 18%. Since the component industry is largely a B2B

[39] https://www.ibef.org/industry/automobiles-presentation

business, this would not have an impact on the Government exchequer, but rather help companies manage their working capital borrowings, which could be better used to invest in long-term assets.[40]

India has some major advantages in the changing automotive landscape as the country has remained at the cutting edge of technology and emission norms for the last several years. However, the move towards electric vehicles will put forward some serious challenges. The most important component for electric vehicles are batteries to run the vehicle. India has extremely limited lithium and cobalt reserves, and will have to depend on imports for these batteries. This dependence on other countries, especially China, could be a serious challenge for the industry. The industry will need to speed up securing multiple lithium sources to reduce dependence on the limited number of sources.

Another critical issue is the levy of a 28% GST on components for electrical vehicles while the finished vehicle itself attracts only 5% GST.[41] The all-industry duty drawback rate for different automobiles is in the range of 2% to 4.7%, while the brand rate is higher than this as the latter covers the actual incidence of taxes incurred. In the absence of an All Industry Rate (AIR) duty drawback that adequately covers the incidence of tax, some companies prefer a brand rate to remain viable in a highly competitive global market. However, the documentation process for brand rate makes it very cumbersome for companies to avail brand rate with a large number of clarifications asked.[42] The Government needs to make the process of opting for a brand rate less cumbersome.

Unlike the erstwhile indirect tax regime, under GST there is no Maximum Retail Price (MRP) based valuation, which applied to parts sold in the after-sales market. For all the original equipment manufacturer (OEM) and auto component product segments, uniform transaction valuation methodology is to be followed. The automobile industry has seen significant disputes under central excise valuation, such as[43]:

- Inclusion of State or Industrial Promotion Subsidies (IPS) retained by the manufacturer;
- Deducibility of post-sale discounts from the dutiable value under excise;
- Treatment of pre-delivery inspection (PDI) charges and other dealer reimbursements, advertisement charges recovered from dealers, etc.;
- Sales through marketing companies and mutuality of interest;
- Receipt or payment of subventions in the distribution chain.

While there was ambiguity surrounding the mechanism/process of seeking export related refunds/ rebates at the time of the GST implementation, the Government has focused on setting up a process for speedy disbursal of pending IGST refund claims and streamlining of the refund process. However, there are various restrictions to export rebates claimed under Rule 96(10) which need to be analysed.[44]

Weighted deduction under the Income Tax Act available to companies for R&D expenditure should be extended to cover a long period of time and be available if R&D is outsourced to third parties.[45]

[40] https://www.livemint.com/
[41] ACMA
[42] https://dea.gov.in/sites/default/files/RevivingAcceleratingIndiaExports_Issues_Suggestions230317.pdf
[43] https://www.pwc.in/assets/pdfs/trs/indirect-tax/sectoral-updates/impact-of-gst-automotive-sector.pdf
[44] Ibid
[45] ACMA & SIAM

Electronics, With A Focus On Cellular Mobiles

Electronics production in India has more than doubled since 2014-15.[46] Within the electronics sector, mobile phone is the most prominent product, accounting for over half of the domestic production of electronics. India is the world's second largest mobile phone manufacturer. "The production of mobile handsets is estimated to go up from ₹18,900 crore (60 million units) in 2014-15 to ₹1,70,000 crore (290 million units) in 2018-19. The total manufacturing capacity for mobile phones in the country is estimated to be about 350 million per annum. It is estimated that about 6.7 lakh persons are employed (directly and indirectly) by the units manufacturing mobile phones and parts/components thereof."[47]

The potential of this sector is huge in terms of GDP contribution, employment, and exports, provided policies are implemented to reduce obstacles to exports and provide a basis for greater competitiveness in world markets. Recognising the potential for production and exports, the National Policy on Electronics 2019 (NPE 2019) set a target of increasing exports by about 66 times between by 2018-19 and 2025.

A number of obstacles to exports arise due to the domestic policies themselves. There are policy changes which could be achieved within a reasonably short time, i.e. within one year (low-hanging fruits) for improving policy and export performance. The Government has been working for quite some time to improve the situation, but it needs a much more focused and determined effort, identifying the priority areas of action and the low hanging fruits in terms of policies that could be addressed in a short period of about one year. Discussions with industry and exporters have helped to identify these areas for policy change, and also areas where the Government has identified specific policy concerns. But the situation is yet to be adequately addressed.

The discussions included both electronics firms and firms producing/exporting mobile phones. There is a major overlap between the concerns of mobile phone exporters and the other electronics hardware exporters. A more detailed consideration of the issues of concern for mobile phones has been provided in the chapter on electronics with a focus on mobile phones.

For the electronics hardware section, the policy concerns relate to cost of power, infrastructure/ logistics, cost of finance, cascading of multiple state and central levies and high transaction costs. Indian exporters face a higher level of taxation, cost of power, finance and freight, as well as poorer infrastructure compared to their competitors from China, Taiwan, Korea and Japan, leading to higher costs of about 8-10 %.[48]

The priority areas identified by exporters of mobile phone include provision of financial support/ incentives (similar to other major exporters), a number of issues related to customs processes and notifications for example, ad hoc or arbitrary interpretation and retrospective effect of changes

[46] Paragraph 1.5 of the National Policy on Electronics 2019.
[47] Ministry of Electronics and Information technology, Government of India, Annual Report 2018-19, page 107. https://meity.gov.in/writereaddata/files/MeiTY_AR_2018-19.pdf
[48] Page 35,
file:///D:/MY%20DATA/Documents/ESC%20STRATEGY%20PAPER%20AND%20BUSINESS%20PLAN%20(1).pdf

made through notification in addition to creating uncertainty and cost burden, some of the notified conditions are impossible to achieve), delay in GST refund[49] (the GST paid on certain cost items is not refunded at all), the need for a real single window for policy co-ordination and facilitation, and policy changes being made without any consideration of the impact on exports.

For the major domestic firms producing/exporting mobile phones, four policy initiatives are major priorities. These include easier access to loans, credit guarantee and interest subvention schemes, establishment of a national design eco-system for mobile firms, and revamping of the Electronics Manufacturing Clusters (EMC) Scheme so that it becomes easier and more practical to benefit from it.

The discussions with exporters indicate that most policies do not take into account the impact on working capital. For the mobile phone segment, which has extensive supply chain linkages, inventory management is a significant part of both operational efficiency and cost of working capital. This in turn has implications for the framework to improve efficiency and competitiveness. Two specific initiatives would be of particular help:
(1) An assessment of the impact of policy on working capital, particularly for sectors which are expected to contribute significantly to exports, must be made an important part of the evaluation of any policy.[50] This is important for competitiveness because any step to reduce working capital cost results in facilitation and improvement in terms of operational efficiency.
(2) While there is an Ease of Doing Business index, it would be useful to **develop an index for Ease of Doing Exports,** encompassing the priority areas of policy focus. This will bring into focus the key areas of policy improvement and provide a mechanism to monitor progress with respect to addressing concerns in the areas so identified.

The low hanging fruits or policy concerns that could be addressed within about one year include several issues relating to the practices of customs.

The chapter on mobile phone points out a number of other policy-related concerns. These include erratic power supply[51], a need to closely evaluate the Phased Manufacturing (PMP) Scheme and its impact on exports[52], the potential benefits of improving ease of selling from SEZ to DTA, improving conditions of work for women so that they may be able to work longer than at present[53], simplified processes for policies such as Advance Authorisation and simplified documentation for processes such as the Services Exports from India Scheme (SEIS). In addition, a reduced time period for all approvals/decisions (including approval for setting up manufacturing units, or fixing "brand rate" of

[49] In certain cases, the amount to be refunded is a large part of the total value of production because of double digit GST rates on certain parts and components. In certain cases, it has reportedly been above INR 1,000 crores
[50] Industry estimates suggest that if working capital is blocked for 4 to 5 months, an additional interest cost is incurred equivalent to an increase of cost of fixed capital by 1 percentage point.
[51] https://www.cag.org.in/blogs/power-supply-quality-select-districts-tamil-nadu-report-card. On average in 2018, 20-25% was at fluctuating voltage, and power outages were about 5-10%. Hence around 30% backup was required. While grid power was not expensive, backup diesel generators costed around 15 Rs per unit thus increasing the average cost to around Rs.9 per unit.
[52] https://economictimes.indiatimes.com/tech/hardware/mobile-companies-seek-review-of-duty-on-parts-as-imports-from-vietnam-soar/articleshow/72432129.cms
[53] Wages and other payments can be high. Orders are cyclical, and a max overtime of 6 hours a month is needed. Production takes place in three hour shifts and women cannot work beyond 7.00 pm in most states. There are stringent safety procedures for women, and women are not allowed to do overtime as the mind-set that prevails is that ladies should not spend 14 hours on floor. Women workers have been seen to be more productive. In this regard, to facilitate their participation, crèche, canteen, transport, and dormitories for them could be subsidized for them by the Government as is done in China.

drawback, i.e. re-imbursement when the input tax is more than All India Rate of drawback), and the establishment of a process of consultation with exporters when policies are changed or new policies are to be announced.

Pharmaceuticals

India is a pharma hub, with 3,000 companies. It has a strong network of over 10,500 manufacturing facilities. The country supplies 60,000 generic brands in 60 therapeutic categories. It is a manufacturer of more than 500 different Active Pharmaceutical Ingredients (APIs). Keeping pace with the globalised world, the Indian pharma industry caters to domestic demand and also engages in contract manufacturing, contract research, clinical trials and contract R&D activities. The sector has emerged as a 'global manufacturing and research hub', and India exports pharmaceutical products to several countries across the globe.[54] Pharmaceuticals are among the top export items from India and one of the six "superstar" sectors selected for Make in India programme.

However, India has steadily lost its base of API production to others, most notably China. Further, with technological developments, the industry faces new and evolving operational conditions and products (biopharmaceuticals). To realise its immense potential and recover its past global strength and dynamism, the industry requires support focusing on facilitation, financial incentives, easing regulatory concerns, and ensuring effective implementation of the policies announced by the Government. Several of the required policy steps are already enumerated in some major Committee Reports which are available to the Government for a number of years. The policy templates in these Reports should be examined carefully and implemented effectively. In fact, industry stakeholders emphasised most of the policies suggested in the following reports:

(1) Katoch Committee Report on Active Pharmaceuticals Ingredients (APIs), 2015[55];
(2) Department of Commerce, 2018, Report of The Task Force on Strategy for Increasing Exports of Pharmaceutical Products[56]; and
(3) Report of the High-Level Advisory Group, set-up by the Ministry of Commerce and Industry, 2019.[57]

This Report keeps the policy suggestions given by these Committees in mind, and builds upon them in three important ways. One, it is based on feedback from the industry/ exporters on the priority areas of support that they require (including developing their capacities for the new emerging products). This makes it easier to focus on selected policy steps instead of a vast number of them. This is included in the section on implementation challenges and their policy responses. Two, the proposals are contemporary and forward-looking from this year onwards. Three, it notes the positive steps being taken by the Government, most recently in March 2020, to provide a major support for domestic Pharmaceutical industry. In this context, it emphasises a crucial insight from industry feedback. The value of the various support policies is realised only with effective implementation of those policies.

[54] Facts from EXIM Bank Study, 2016; IBEF and Invest India.
[55] https://pharmaceuticals.gov.in/sites/default/files/Katoch%20Committe%20Report.pdf
[56] https://commerce.gov.in/writereaddata/uploadedfile/MOC_635567633057176521_Report%20Tas%20Force%20Pharma%2012th%20Dec%2008.pdf
[57] https://commerce.gov.in/writereaddata/uploadedfile/MOC_637084607407371826_HLAG%20Report%20.pdf

The main objectives to be addressed through the policy initiatives include:

(a) Reviving domestic manufacturing of KSM/ Intermediates/ Bulk Drugs/ APIs;
(b) Ease of Doing Business with facilitation, provision of effective trade facilities, addressing environmental-policy related issues, and regulatory concerns;
(c) Active programme for development of the biopharmaceuticals and APIs in India.

There are certain challenges hindering the growth of this sector despite its enormous growth potential, such as: high dependence on China for API, policy implementation and trade facilitation issues, the challenges of the bio pharma sector, inadequate progress on domestic standards and domestic regulatory regimes, disincentives due to price-control policies, and a range of non-tariff barriers faced by pharmaceutical exports. In addition, technology and product mix are changing, with a need to develop an effective focus on developing India's capacities in the emerging areas. The policy-makers and the industry have to develop a strategic perspective for India to regain its lost ground. The priority areas of action include improving domestic production of basic products such as Key Starting Materials (KSM)/ Active Pharmaceutical Ingredients (API), developing new products, establishing R&D facilities and capabilities, upgrading product and process-quality, reducing undue burden from environmental policies, promoting wider market access for traditional products, and trade policy initiatives for ensuring more certain and larger market access for Indian pharmaceutical exports.

To the extent that lack of effective policy implementation is a concern strongly expressed by the stakeholders, Chapter 6 suggests three High-Level Committees for co-ordinating the implementation process. Two Committees would address environmental policy related concerns. One, a coordination Committee in the Ministry of Environment and Forestry chaired by a senior official. Second, a Minister-level Committee which would address all larger policy-related issues, to ensure effective and timely implementation. For implementation of all other policy matters, the suggestion is for a Committee chaired by the Principal Secretary to the Prime Minister, with Secretary level officers from various concerned ministries as members. A focus on the priority areas of intervention based on feedback from industry/exporters, would be a good starting point for improving export capabilities and opportunities.

1.8 Conclusions

The Government has been working to identify the policies that would help promote exports and build a better operational environment. Different Ministries/Departments have initiated policy reforms in this process. This chapter provides a list of policy areas which the Government is trying to address. In several instances, these initiatives include the policies identified as priority areas of concern or low hanging fruits, i.e. policies that could be addressed within a year or so. This implies a need for greater focus on monitoring and addressal of glitches that prevent successful implementation of these policies. The chapter on mobile phones notes the areas where the Government has been trying to improve policies for some time, and makes the case for a management information system (MIS) which could be a method of co-ordination amongst the relevant Government Ministries/Departments and industry.

Some common issues identified across sectors include the following:
High GST rate and refund delays – Mobile phones, automotive products, gems and jewellery
Export incentives – extend or replace MEIS with another effective scheme – Mobile phones, automotive products, textiles and apparel, gems and jewellery[58]
Delays in approvals -All six sectors studied in the Report
Removal of inverted duty structures (tariffs) -Mobile phones, automotive products, textiles and apparel
Trade Facilitation issues at DGFT and Customs -Mobile phones, automotive products, pharmaceuticals, gems and jewellery
Logistics issues -All six sectors
Regulatory issues -Dealing with multiple agencies: Pharmaceuticals, automotive products, gems and jewellery
Lack of effective implementation of policy -All six sectors

These problems are likely to be accentuated by the complete lockdown imposed due to the Coronavirus in India. However, in the medium term after this crisis is over, several countries will make intense efforts to compete in the global market and regain or increase their market shares. The initiatives discussed in this report should be implemented in the period available to improve export capabilities and competitiveness. That is essential to provide a strong basis to India achieving a high growth that is encompassed in the goal of being a USD 5 trillion economy by 2025.

[58] The MEIS scheme has been extended recently. However, the support under this now is less than provided early 2019. Moreover, MEIS would have to be removed at some time in the not too distant future because this scheme has been determined to be inconsistent with the WTO provisions.

Annex 1.1

Table on GST rates in selected sectors

	Commodity	GST 2019 (%)	Rate of GST (To be used in model)
Chapter 30	**PHARMA INDUSTRY**		
30	Insulin, Diagnostic kits for detection of all types of hepatitis, Desferrioxamine injection or deferiprone, Cyclosporin, Medicaments (including veterinary medicaments) used in bio-chemic systems and not bearing a brand name, Oral re-hydration salts, Drugs or medicines including their salts and esters and diagnostic test kits, specified in List 1 appended to this Schedule, Formulations manufactured from the bulk drugs specified in List 2 appended to this Schedule	5	0
30	Menthol and menthol crystals, Peppermint (Mentha Oil), Fractionated / de-terpenated mentha oil (DTMO), De-mentholised oil (DMO), Spearmint oil, Mentha piperita oil	12	0
30	Nicotine polacrilex gum	18	0
3001	Glands and other organs for organo-therapeutic uses, dried, whether or not powdered; extracts of glands or other organs or of their secretions for organo-therapeutic uses; heparin and its salts; other human or animal substances prepared for therapeutic or prophylactic uses, not elsewhere specified or included	12	0
3001	Human Blood and its components	Nil	0
3001	Animal or Human Blood Vaccines	5	0
3002	Animal blood prepared for therapeutic, prophylactic or diagnostic uses; antisera and other blood fractions and modified immunological products, whether or not obtained by means of biotechnological processes; toxins, cultures of micro-organisms (excluding yeasts) and similar products	12	0
3003	Medicaments (excluding goods of head-ing 30.02, 30.05 or 30.06) consisting of two or more constituents which have been mixed together for therapeutic or prophylactic uses, not put up in measured doses or in forms or packings for retail sale, including Ayurvaedic, Unani, Siddha, homoeopathic or Bio-chemic systems medicaments	12	0
3004	Medicaments (excluding goods of heading 30.02, 30.05 or 30.06) consisting of mixed or unmixed products for therapeutic or prophylactic uses, put up in measured doses (including those in the form of transdermal administration systems) or in forms or packings for retail sale, including Ayurvaedic, Unani, homoeopathic siddha or Bio-chemic systems medicaments, put up for retail sale	12	0
3005	Wadding, gauze, bandages and similar articles (for example, dressings, adhesive plasters, poultices), impregnated or coated with pharmaceutical substances or put up in forms or packings for retail sale for medical, surgical, dental or veterinary purposes	12	0
3005	All types of contraceptives	Nil	0

3005	Animal or Human Blood Vaccines	5	0
3006	Pharmaceutical goods specified in Note 4 to this Chapter [i.e. Sterile surgical catgut, similar sterile suture materials (including sterile absorbable surgical or dental yarns) and sterile tissue adhesives for surgical wound closure; sterile laminaria and sterile laminaria tents; sterile absorbable surgical or dental haemostatics; sterile surgical or denatal adhesion barriers, whether or not absor	12	0
CHAPTER 87	**AUTOMOBILE AND AUTOMOBILE COMPONENTS INDUSTRY**		0
4001	Natural rubber, balata, gutta-percha, guayule, chicle and similar natural gums, in primary forms or in plates, sheets or strip	5	0
4004 00 00	Waste, parings or scrap of rubber (other than hard rubber)	5	0
4011 30 00	New pneumatic tyres, of rubber of a kind used on aircraft	5	0
4011, 4013	Pneumatic tyres or inner tubes, of rubber, of a kind used on / in bicycles, cycle -rickshaws and three wheeled powered cycle rickshaws	5	0
4016	Erasers	5	0
7001	Cullet or other waste or scrap of glass	5	0
7018	Glass beads.	5	0
84	Pawan Chakki that is Air Based Atta Chakki	5	0
8407 10 00, 8411	Aircraft engines	5	0
8413, 8413 91	Hand pumps and parts thereof	5	0
8419 19	Solar water heater and system	5	0
8437	Machines for cleaning, sorting or grading, seed, grain or dried leguminous vegetables; machinery used in milling industry or for the working of cereals or dried leguminous vegetables other than farm type machinery and parts thereof	5	0
8444	Machines for extruding, drawing, texturing or cutting man-made textile material	18	0
8445	Machines for preparing textile fibres; spinning, doubling or twisting machines and other machi-nery for producing textile yarns; textile reeling or winding (including weft-winding) machines and machines for preparing textile yarns for use on the machines.	18	0
8446	Weaving **machines** (looms)	18	0
8452	Sewing **machines,** other than booksewing **machines** of heading 8440, Furniture, bases and covers specially designed for sewing **machines**, Sewing **machine** needles.	12	0
8504	Charger or charging station for Electrically operated vehicles	5	0
84, 85 or 94	Following renewable energy devices & parts for their manufacture (a) Bio-gas plant (b) Solar power based devices (c) Solar power generating system (d) Wind mills, Wind Operated Electricity Generator (WOEG)	5	0

	(e) Waste toenergyplants/devices (f) Solarlantern/solarlamp (g) Ocean waves/tidal waves energy devices/plants (h) [Photo voltaic cells, whether or not assembled in modules or made up into panels Explanation: If the goods specified in this entry are supplied, by a supplier, along with supplies of other goods and services, one of which being a taxable service specified in the entry at S. No. 38 of the Table mentioned in the notification No. 11/2017-Central Tax (Rate), dated 28th June, 2017 [G.S.R. 690(E)], the value of supply of goods for the purposes of this entry shall be deemed as seventy per cent. of the gross consideration charged for all such supplies, and the remaining thirty per cent. of the gross consideration charged shall be deemed as value of the said taxable service.		
8509	Wet grinder consisting of stone as grinder	5	0
84 or 85	E-waste Explanation: For the purpose of this entry, e-waste means electrical and electronic equipment listed in Schedule I of the E-Waste (Management) Rules, 2016 (published in the Gazette of India vide G.S.R. 338 (E) dated the 23rd March, 2016), whole or in part if discarded as waste by the consumer or bulk consumer	5	0
87	Electrically operated vehicles, including two and three wheeled electric vehicles. Explanation .-For the purposes of this entry, "Electrically operated vehicles" means vehicles which are run solely on electrical energy derived from an external source or from one or more electrical batteries fitted to such road vehicles and shall include E-bicycles.	5	0
8713	Carriages for disabled persons, whether or not motorised or otherwise mechanically propelled	5	0
8714 20	Parts and accessories of carriage for disabled persons	5	0
8710	Tanks and other armoured fighting vehicles, motorised, whether or not fitted with weapons, and parts of such vehicles	12	0
8701	Tractors (except road tractors for semi-trailers of engine capacity more than 1800 cc)	12	0
8702	Motor vehicles for the transport of ten or more persons, including the driver (except 870210 ,870220, 870230, 870290)	28	0
8703	Motor vehicles cleared as ambulances duly fitted with all the fitments, furniture and accessories necessary for an ambulance from the factory manufacturing such motor vehicles	28	0
8703	Three wheeled vehicles	28	0
8703	Cars for physically handicapped persons, subject to the following conditions: a) an officer not below the rank of Deputy Secretary to the Government of India in the Department of Heavy Industries certifies that the said goods are capable of being used by the physically handicapped persons; and b) the buyer of the car gives an affidavit that he shall not dispose of the car for a period of five years after its purchase.	18	0

8703	Hydrogen vehicles based on fuel cell tech and of length not exceeding 4000 mm. Explanation. For the purposes of this entry, the specification of the motor vehicle shall be determined as per the Motor Vehicles Act, 1988 (59 of 1988) and the rules made there under.	28	0
8703	Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 8702), including station wagons and racing cars [other than Cars for physically handicapped persons, other than those mentioned at S. Nos. 1308 to 1320 above	28	0
8704	Refrigerated motor vehicles	18	0
8704	Motor vehicles for the transport of goods [other than Refrigerated motor vehicles]	28	0
8705	Special purpose motor vehicles, other than those principally designed for the transport of persons or goods (for example, breakdown lorries, crane lorries, fire fighting vehicles, concrete-mixer lorries, road sweeper lorries, spraying lorries, mobile workshops, mobile radiological unit)	28	0
8706	Chassis fitted with engines, for the motor vehicles of headings 8701 to 8705	28	0
8707	Bodies (including cabs), for the motor vehicles of headings 8701 to 8705	28	0
8708	Following parts of tractors namely: a. Rear Tractor wheel rim, b. tractor centre housing, c. tractor housing transmission, d. tractor support front axle	18	0
8708	Parts and accessories of the motor vehicles of headings 8701 to 8705 [other than specified parts of tractors]	28	0
8709	Works trucks, self-propelled, not fitted with lifting or handling equipment, of the type used in factories, warehouses, dock areas or airports for short distance transport of goods; tractors of the type used on railway station platforms; parts of the foregoing vehicles	28	0
8711	Motorcycles (including mopeds) and cycles fitted with an auxiliary motor, with or without side-cars; side-cars (engine capacity not exceeding 350cc)	28	0
8711	Motorcycles of engine capacity exceeding 350 cc.	28	0
8712	Bicycles and other cycles (including delivery tricycles), not motorised	12	0
8713	Carriages for disabled persons, whether or not motorised or otherwise mechanically propelled	5	0
8714	Parts and accessories of bicycles and other cycles (including delivery tricycles), not motorised, of 8712	12	0
8714	Parts and accessories of vehicles of headings 8711 and 8713	18	0
8715	Baby carriages and parts thereof	18	0
8716	Trailers and semi-trailers; other vehicles, not mechanically propelled; parts thereof [other than Self-loading or self-unloading trailers for agricultural purposes, and Hand propelled vehicles (e.g. hand carts, rickshaws and the like); animal drawn vehicles]	18	0
87162000	Self-loading or self-unloading trailers for agricultural purposes	12	0

87089900	Hydraulic and its parts thereof for tractor	18	0
87089900	Fender, Hood, wrapper, Grills, Side Panel, Extension Plates, Fuel Tank and parts thereof for tractors	18	0
87089400	Steering wheels and its parts thereof for tractor	18	0
87089300	Clutch assembly and its parts thereof for tractors	18	0
87089200	Silencer assembly for tractors and arts thereof	18	0
87089100	(i) Radiator assembly for tractors and parts thereof (ii) Cooling system for tractor engine and parts thereof	18	0
87087000	Road wheels and parts and accessories thereof for tractors	18	0
87085000	Transaxles and its parts thereof for tractors	18	0
87084000	Gear boxes and parts thereof for tractors	18	0
87083000	Brakes assembly and its parts thereof for tractors	18	0
87081010	Bumpers and parts thereof for tractors	18	0
87031010	Electrically operated vehicles, including three wheeled electric motor vehicles.	28	0
871680	Hand propelled vehicles (e.g. hand carts, rickshaws and the like); animal drawn vehicles	12	0
870380	Electrically operated vehicles, including three wheeled electric motor vehicles.	28	0
870370	Following Vehicles, with both compression -ignition internal combustion piston engine [diesel-or semi diesel) and electric motor as motors for propulsion; a) Motor vehicles cleared as ambulances duly fitted with all the fitments, furniture and accessories necessary for an ambulance from the factory manufacturing such motor vehicles b) Three wheeled vehicles c) Motor vehicles of engine capacity not exceeding 1500 cc and of length not exceeding 4000 mm. Explanation. For the purposes of this entry, the specification of the motor vehicle shall be determined as per the Motor Vehicles Act, 1988 (59 of 1988) and the rules made there under.	28	0
870360	Following Vehicles, with both compression -ignition internal combustion piston engine [diesel-or semi diesel) and electric motor as motors for propulsion; a) Motor vehicles cleared as ambulances duly fitted with all the fitments, furniture and accessories necessary for an ambulance from the factory manufacturing such motor vehicles b) Three wheeled vehicles c) Motor vehicles of engine capacity not exceeding 1500 cc and of length not exceeding 4000 mm. Explanation. For the purposes of this entry, the specification of the motor vehicle shall be determined as per the Motor Vehicles Act, 1988 (59 of 1988) and the rules made there under.	28	0
870350	Following Vehicles, with both spark-ignition internal combustion reciprocating piston engine and electric motor as motors for propulsion; a) Motor vehicles cleared as ambulances duly fitted with all the fitments, furniture and accessories necessary for an ambulance from the factory manufacturing such motor vehicles b) Three wheeled vehicles c) Motor vehicles of engine capacity not exceeding 1200cc and of length not exceeding 4000 mm. Explanation. For the purposes of this entry, the specification of the motor vehicle shall be determined as per the Motor Vehicles Act, 1988 (59 of 1988) and the rules made there under.	28	0

870340	Following Vehicles, with both spark-ignition internal combustion reciprocating piston engine and electric motor as motors for propulsion; a) Motor vehicles cleared as ambulances duly fitted with all the fitments, furniture and accessories necessary for an ambulance from the factory manufacturing such motor vehicles b) Three wheeled vehicles c) Motor vehicles of engine capacity not exceeding 1200cc and of length not exceeding 4000 mm. Explanation. For the purposes of this entry, the specification of the motor vehicle shall be determined as per the Motor Vehicles Act, 1988 (59 of 1988) and the rules made there under.	28	0
870331	Diesel driven motor vehicles of engine capacity not exceeding 1500 cc and of length not exceeding 4000 mm. Explanation. For the purposes of this entry, the specification of the motor vehicle shall be determined as per the Motor Vehicles Act, 1988 (59 of 1988) and the rules made there under.	28	0
870322	Petrol, Liquefied petroleum gases (LPG) or compressed natural gas (CNG) driven motor vehicles of engine capacity not exceeding 1200cc and of length not exceeding 4000 mm. Explanation. For the purposes of this entry, the specification of the motor vehicle shall be determined as per the Motor Vehicles Act, 1988 (59 of 1988) and the rules made there under.	28	0
870321	Petrol, Liquefied petroleum gases (LPG) or compressed natural gas (CNG) driven motor vehicles of engine capacity not exceeding 1200cc and of length not exceeding 4000 mm. Explanation. For the purposes of this entry, the specification of the motor vehicle shall be determined as per the Motor Vehicles Act, 1988 (59 of 1988) and the rules made there under.	28	0
870240	Motor vehicles for the transport of 10 or more persons but not more than 13, including the driver	28	0
870230	Motor vehicles for the transport of 10 or more persons but not more than 13, including the driver	28	0
870220	Motor vehicles for the transport of 10 or more persons but not more than 13, including the driver	28	0
8710	Tanks and other armoured fighting vehicles, motorised, whether or not fitted with weapons, and parts of such vehicles	12	0
90	Coronary stents and coronary stent systems for use with cardiac catheters	5	0
90 or any other Chapter	Artificial kidney	5	0
90 or 84	Disposable sterilized dialyzer or micro barrier of artificial kidney	5	0
90 or any other Chapter	Parts of the following goods, namely:- (i) Crutches; (ii) Wheel chairs; (iii) Walking frames; (iv) Tricycles; (v) Braillers; and (vi) Artificial limbs	5	0
90 or any other Chapter	Assistive devices, rehabilitWation aids and other goods for disabled, specified in List 3 appended to this Schedule	5	0

Chapter 50-63	**Cotton and Textile Industry**		0
5004 to 5006	Silk yarn	5	0
5007	Woven fabrics of silk or of silk waste	5	0
5104	Garneted stock of wool or of fine or coarse animal hair, shoddy wool	5	0
5105	Wool and fine or coarse animal hair, carded or combed	5	0
5106 to 5110	Yarn of wool or of animal hair	5	0
5111 to 5113	Woven fabrics of wool or of animal hair	5	0
5201 to 5203	Cotton and Cotton waste	5	0
5204	Cotton sewing thread, whether or not put up for retail sale	5	0
5205 to 5207	Cotton yarn [other than khadi yarn]	5	0
5208 to 5212	Woven fabrics of cotton	5	0
5301	All goods i.e. flax, raw or processed but not spun; flax tow and waste (including yarn waste and garneted stock)	5	0
5302	True hemp (Cannabis sativa L), raw or processed but not spun; tow and waste of true hemp (including yarn waste and garneted stock)	5	0
5303	All goods i.e. textile bast fibres [other than jute fibres, raw orprocessed but not spun]; tow and waste of these fibres (including yarn waste and garneted stock)	5	0
5305 to 5308	All goods [other than coconut coir fibre] including yarn of flax, jute, other textile bast fibres, other vegetable textile fibres; paper yarn, including coir pith compost put up in unit container and bearing a brand name	5	0
5309 to 5311	Woven fabrics of other vegetable textile fibres, paper yarn	5	0
5407, 5408	Woven fabrics of manmade textile materials	5	0
5512 to 5516	Woven fabrics of manmade staple fibres	5	0
5605 0010	Real zari thread (gold) and silver thread, combined with textile thread	5	0
5607	Jute twine, coir cordage or ropes	5	0
5608	Knotted netting of twine, cordage or rope; made up fishing nets and other made up nets, of textile materials	5	0
5609	Products of coir	5	0
5702, 5703, 5705	Coir mats, matting, floor covering and handloom durries	5	0
5801	all goods	5	0
5806	Narrow woven fabrics, other than goods of heading 5807; narrow fabrics consisting of warp without weft assembled by means of an adhesive (bolducs)	5	0
5808	Saree fall	5	0
5809, 5810	Embroidery or zari articles, that is to say,-imi, zari, kasab, salma, dabka, chumki, gota, sitara, naqsi, kora, glass beads, badla, gizai	5	0
60	Knitted or crocheted fabrics [All goods]	5	0
61 or 6501 or 6505	Article of apparel and clothing accessories or cap/topi, knitted or crocheted, of sale value not exceeding Rs 1000 per piece	5	0
62	Articles of apparel and clothing accessories, not knitted or crocheted, of sale value not exceeding Rs. 1000 per piece	5	0

63 [other than 6309]	Other made up textile articles, sets, of sale value not exceeding Rs. 1000 per piece	5	0
6309 or 6310	Worn clothing and other worn articles; rags	5	0
Chapter 71	***Gems and Jewellery***		0
7101	Pearls, natural or cultured, whether or not worked or graded but not strung, mounted or set; pearls, natural or cultured, temporarily strung for convenience of transport	3	0
7102	Diamonds, non-industrial unworked or simply sawn, cleaved or bruted	0.25	0
7102	Diamonds, whether or not worked, but not mounted or set [other than Non-Industrial Unworked or simply sawn, cleaved or bruted]	3	0
7103	Precious stones (other than diamonds) and semi-precious stones, unworked or simply sawn or roughly shaped	0.25	0
7103	Precious stones (other than diamonds) and semi-precious stones, whether or not worked or graded but not strung, mounted or set; ungraded precious stones (other than diamonds) and semi-precious stones, temporarily strung for convenience of transport [other than Unworked or simply sawn or roughly shaped]	3	0
7104	Synthetic or reconstructed precious or semi-precious stones, unworked or simply sawn or roughly shaped	0.25	0
7104	Synthetic or reconstructed precious or semi-precious stones, whether or not worked or graded but not strung, mounted or set; ungraded synthetic or reconstructed precious or semi-precious stones, temporarily strung for convenience of transport [other than Unworked or simply sawn or roughly shaped]	3	0
7105	Dust and powder of natural or synthetic precious or semi-precious stones	3	0
7106	Silver (including silver plated with gold or platinum), unwrought or in semi-manufactured forms, or in powder form	3	0
7107	Base metals clad with silver, not further worked than semi-manufactured	3	0
7108	Gold (including gold plated with platinum) unwrought or in semi-manufactured forms, or in powder form	3	0
7109	Base metals or silver, clad with gold, not further worked than semi-manufactured	3	0
7110	Platinum, unwrought or in semi-manufactured forms, or in powder form	3	0
7111	Base metals, silver or gold, clad with platinum, not further worked than semi-manufactured	3	0
7112	Waste and scrap of precious metal or of metal clad with precious metal; other waste and scrap containing precious metal or precious metal compounds, of a kind used principally for the recovery of precious metal.	3	0
7113	Articles of jewellery and parts thereof, of precious metal or of metal clad with precious metal	3	0
7114	Articles of goldsmiths' or silversmiths' wares and parts thereof, of precious metal or of metal clad with precious metal	3	0

7115	Other articles of precious metal or of metal clad with precious metal	3	0
7116	Articles of natural or cultured pearls, precious or semi-precious stones (natural, synthetic or reconstructed	3	0
7117	Imitation jewellery	3	0
7118	Coin	3	0
Chapter 85	**Mobile Phones and Accessories**		0
85	Parts for manufacture of Telephones for cellular networks or for other wireless networks	12	0
8517	Telephones for cellular networks or for other wireless networks	12	0
C 8504er	Charger	28	0
8518	Earphone	18	0
8506	Batteries	28	0
8504	Power Bank	28	0
4202	Phone Case & Back Cover	28	0
8523	Memory Card	18	0
8504	USB Cable	28	0
8518	Speakers	18	0
8518	Headphones, Plastic Screen Protector	18	0
3923	Tempered Glass Screen Protector	18	0

Annex 1.2

Description of GTAP Model

The GTAP model is a multi-sectoral and multi-regional economic model, which captures linkages between several industries in each country and across the world. It captures markets for supply and demand in households (consumers), firms, primary factors and products. Trade between a given industry and linkages across industries are captured based on an Input-Output (IO) table for every country within the data base. Government collects taxes and provides subsidies to firms and individuals in each country, and also spends on various goods and services. Bilateral exports and imports between different countries are captured, based on relative price differences arising from tax/subsidy policies and technological changes. The model also allows for global savings and investment flows to balance each other globally. Households receive income from the labour and capital that they own. Consumption shares are determined by Cobb-Douglas expenditure function with shares derived from IO tables.

The purpose of the GTAP model is to determine the effects of a change in trade policy on the endogenous variables of the model – prices, production, consumption, exports, imports and welfare. Introducing such changes in the model is known as a shock or a simulation; it represents what the economy would look like if the policy change or shock had occurred. The difference in the values of the endogenous variables in the base data and the simulation represents the effect of the policy change. All the policy simulations as well as results reported in the paper, as in other major models of this type, may be thought of as occurring in one-shot over a time-period that is needed for equilibrium to be achieved. In other words, the model analyses the effect of tariff shocks reductions and removal of GST on trade, production and employment at the economy wide level and at the sectoral level.

The shocks related to tariff reductions are straightforward. The tariff reduction is specified as percentage tariff shock which works itself through the input output linkages in the entire economy. The period that this shock takes to work out all its effects in from one stable general equilibrium period to the other. This period normally takes three years in India. The GST shock is treated as the removal of an export tax of the same amount as specified by rates in Annex 1.1. This is because GST removal is akin to the removal of an export tax. Providing immediate refund is like removing a disincentive to export.

Using these policy shocks, the results of the exercise have been shown in Chapter 1.

Annex 1.3 Tariff

Rates for inputs

HSN CODE	COMMODITY	TARIFF RATE (%) (as on 31.12.2019)	GTAP SECTOR CODE	IMPORT (Values in US $ Million)
	GEMS AND JEWELLERY			
7102	Diamonds, whether or not worked, but not mounted or set.	10%	OMN	25,486
7104	Synthetic or reconstructed precious or semi-precious stones, whether or not worked or graded but not strung, mounted or set; ungraded synthetic or reconstructed precious or semi-precious stones, temporarily strung for convenience of transport.	10%	CRP	323
7106	Silver (including silver plated with gold or platinum), unwrought or in semi-manufactured forms, or in powder form	12.5%	NFM	3,748
7108	Gold (including gold plated with platinum) unwrought or in semi-manufactured forms, or in powder form	12.5%	NFM	32,910
	AUTOMOBILE COMPONENTS			
840999	Parts suitable for use solely or principally with compression-ignition internal combustion piston engine "diesel or semi-diesel engine", n.e.s.	15%	MVH	776
8408	Compression-ignition internal combustion piston engines (diesel or semi-diesel engines).	15%	OME, MHV	383
8483	Transmission shafts (including cam shafts and crank shafts) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers, including torque converters; flywheels and pulleys, including pulley blocks; clutches and shaft couplings (including universal joints).	7.5%	OME	1,263
	COTTON AND TEXTILE			
291736	Terephthalic acid and its salts	10%	CRP	487
2942	Other organic compounds.	10%	CRP	443
5205	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put up for retail sale.	20%	TEX	16
5206	Cotton yarn (other than sewing thread), containing less than 85 % by weight of cotton, not put up for retail sale	20%	TEX	5
5201	Cotton, not carded or combed.	25%	PFB	622
5303	Cotton, carded or combed.	10%	PFB	34
4702	Chemical wood pulp, dissolving grades	5%	PPP	499

	PHARMACEUTICAL SECTOR			
300410	Medicaments containing antibiotics, put up in measured doses "incl. those in the form of transdermal administration" or in forms or packings for retail sale (excl. medicaments containing penicillins or derivatives thereof with a penicillanic structure, or streptomycines or derivatives thereof)	10%	CRP	17
300420	Medicaments containing penicillins or derivatives thereof with a penicillanic acid structure, or streptomycins or derivatives thereof, put up in measured doses "incl. those in the form of transdermal administration" or in forms or packings for retail sale	10%	CRP	50
	MOBILE AND ELECTRONICS			
8517 12 90	Mobile handsets	20%	ELE	1,616
850440 30	Charger/Adapter	15%	OME	1,105
850760 00 3920 99 99	Battery Pack*	20%	CRP	1,226
8518 30 00	Wired Headset	15%	ELE	283
7318 15 00 7326 90 99 85389000	Mechanics*	7.5%	FMP, OME	632
3926 90 99 3926 90 91 8504 90 90	Die Cut Parts*	10%	FMP, OME	613
8518 10 00 8518 29 00 8518 40 00	Microphone and Receiver*	15%	ELE	62
854419 854442 854449	USB Cable*	15%	OME	125
8517 70 10	Printed Circuit Board Assembly (PCBA)	10%	ELE	8,713
8517 70 90, 8525 80 20, 8525 80 90, 8529 90 90	Camera Module*	15%	ELE	1,314
8517 70 90	Connectors	15%	ELE	6,592
85177090	Display Assembly	15%	ELE	
85177090	Touch Panel/Cover Glass Assembly	15%	ELE	
85177090	Vibrator Motor/Ringer	15%	ELE	
85177090	Fingerprint Sensors	15%	ELE	

CHAPTER

2

Textiles and Clothing

2.1 Introduction

Textiles and Clothing (T&C) exports, along with the allied export sectors of handicrafts and carpets, represented 12% of India's overall exports[60] in 2018-19. In terms of its importance in India's exports hierarchy, T&C occupies the third position, behind Petroleum Products and Gems & Jewellery.[61] Whereas the import intensity of Petroleum Products and Gems & Jewellery exports is quite high, the import intensity in T&C exports has traditionally been quite low because of the heavy dependence on cotton-based exports. The textile industry is the largest employment provider in the country, after agriculture, with 45 million people employed directly and another 60 million employed in allied sectors.[62] A bird's eye view of India's T&C exports in the past few years is provided in Table 2.1 below.

Table 2.1: India's T&C Exports (2014-15 to 2018-19)

Product (figures in USD Billion)	2014-15	2015-16	2016-17	2017-18	2018-19
Clothing (Garments)	16.8	17.0	17.4	16.7	16.2
Cotton Raw, including waste	1.9	1.9	1.6	1.9	2.1
Cotton Yarn	3.9	3.6	3.2	3.4	3.9
Other textile yarn, fabrics, made-ups etc	0.4	0.3	0.4	0.4	0.5
Cotton Fabrics & Made-Ups	5.5	5.2	5.4	5.4	6.0
Manmade Staple Fibre	0.6	0.5	0.6	0.6	0.6
Manmade Yarn, Fabrics and Made-Ups	5.3	4.7	4.6	4.8	5.0
Wool and Woollen Textiles	0.2	0.2	0.2	0.2	0.2
Silk products	0.1	0.1	0.08	0.07	0.08
Handloom products (including carpets)	0.4	0.4	0.4	0.4	0.3
Jute products	0.4	0.6	0.3	0.3	0.3
TOTAL Textiles and Clothing	36.9	36.0	35.4	36.7	36.6
Handicrafts	3.3	3.3	3.6	3.6	3.8
TOTAL T&G including Handicrafts	40.1	39.3	39.0	39.2	40.4
India's overall exports	310.3	262.3	275.9	303.4	329.5
%T&G Exports of overall exports	**13%**	**15%**	**14%**	**13%**	**12%**

Source: Ministry of Textiles

[60] http://texmin.nic.in/textile-data: Annual Report (2018-19), Ministry of Textiles
[61] https://commerce-app.gov.in/eidb/default.asp: Export-Import Data Bank, Dept. of Commerce
[62] http://texmin.nic.in/textile-data: Annual Report (2018-19), Ministry of Textiles

From Table 2.1 it is clear that Textiles and Clothing exports have remained more or less stagnant, and their share has been declining even as a percentage of India's overall exports. Table 2.2 provides a comparative overview of India's T&C exports relative to its major competitors, viz. China, the EU, Vietnam and Bangladesh for the period 2015 to 2018.

Table 2.2: Comparison of India's T&C Exports with its Key Competitors

Country Exports (in USD Billion)	Textiles		% Increase	Clothing		% Increase
Year	2015	2018		2015	2018	
China	109.9	118.5	7.8	175	157.8	(-9.8)
EU	64.1	74.0	6.6	112	143.5	28.1
Vietnam	5.0	8.0	60.0	22	31.5	43.1
Bangladesh	....	....	-	26	32.5	25
India	17.2	18.1	5.2	18	16.6	(-7.8)
WORLD	291	315.0	6.3	445	505.0	13.4

Source: WTO

It is evident that while China, the EU, Vietnam and Bangladesh (the leading exporters) are increasing their T&C exports steadily and the global trade in T&C is also going up, India is stagnating. It is also clear from the two Tables that if India delays taking robust measures to improve its competitiveness in existing as well as new areas of T&C, it will start losing its share of the growing global T&C market. India could even start backsliding in absolute terms, which will have implications not only in terms of our foreign exchange earnings but also employment.

2.2 Domestic Constraints identified by Stakeholders

While identifying and analysing the domestic constraints that are hampering the growth of our T&C exports, we have relied extensively on the questionnaire method and focussed discussions to elicit information from exporters, export promotion agencies and other stakeholders. Exports of raw cotton, jute, handicrafts and carpets have not been considered in the following analysis as they are not part of the core segments of T&C. Moreover, T&C is a structurally segmented industry comprising yarn (cotton, manmade fibres), fabrics, fabric processing, made-ups and clothing with few vertically integrated composite mills (from fibre to clothing) operating in the country. We have, therefore, also considered the issues segment-wise. The following issues-some of which cut across segments (horizontal) with others specific to particular segments (vertical)-were raised by the stakeholders:

2.2.1 Horizontal Issues

(i) A number of exporters are not aware of all the subsidy regimes that could benefit them. In some cases, they find it difficult to correctly fill the required information in the relevant form or inadvertently make an error when seeking access to financial support under a scheme. Some also said that the documents are too many and the processes are not easy. A number of exporters said that multiple windows had to be tapped for a single scheme. They prefer a single window for all the schemes, with an easier form and simpler information requirements.

(ii) Though improvements in IGST refunds have now been made, the exporters contended that IGST credits were still difficult to obtain. Refunds from the State GST authorities was also posing problems. There should be an online platform to avail the refund. Banks should extend credit (at zero interest rates) against refund documents. The bank interest could be paid by the Government as a subsidy directly to the banks. This will alleviate the problem of rising working capital costs on account of delayed GST refunds.

(iii) Many exporters also claimed that there had been delays in getting the Rebate on State Levies (ROSL) and duty drawback refunds. For the latter, significant problems were encountered in getting the Export General Manifest (EGM) and making sure that the right details were entered on the different portals. Manual intervention was required often to obtain scrips/GST refunds and middlemen had to be engaged, at some cost, to get the disbursements. Simplifying the processes would help the industry immensely.

(iv) At the time of clearance of goods, an importer pays duty on CIF value of material, which also includes ocean freight. Thereafter, the importer again pays GST under Reverse Charge Mechanism (RCM) on ocean freight and deposits the tax with the Government. Thus, there is double taxation on ocean freight, which may be exempted from payment of GST under RCM. Taxes should be reduced and documentation should be made simpler.

(v) Small firms complained that most shipping bills do not get uploaded to the DGFT server on time. Also, the Electronic Bank Realization Certificates (e-BRCs) for exporters were often not reflected on the DGFT server. The server was frequently down, which delayed uploading and errors once made in this process were difficult to correct. They felt that there should be a single window clearance as the involvement of several agencies and Government Departments created problems for them.

2.2.2 Vertical Issues

2.2.2.i Yarn

COTTON

(i) The Minimum Support Price (MSP) fixed by the Government is not in sync with international prices. In some years it is higher than the international prices, leading to an erosion of the profitability of spinners and low capacity utilisation. It may be mentioned that the installed spinning capacity of the industry has been built up on the basis of an assumption of about 30% of yarn exports. Hence an MSP higher than or equal to international prices leads to serious disruption in the exports of cotton yarn, which could be avoided by having a cotton stock and price stabilisation policy in place. China has adopted such a policy. Another option, to be considered in the long term, could be a substitution of the MSP mechanism by a scheme for Direct Benefit Transfer (DBT) to the cotton farmers.

(ii) The spinning industry has benefited significantly from the earlier TUFS/ Revised TUFS scheme and is the only segment of T&C which is state of the art. However, the Ministry of Textiles has not allowed the extant ATUFS scheme[63] to be used by the spinning sector because it has used the earlier schemes in a major way to the exclusion of the weaving and other downstream segments. The ATUFS should

allow spinning units to access subsidies because more high-speed shuttleless looms (which must be set up to gain global competitiveness) would require more high-quality yarn. Thus, if India is to cater to its growing domestic demand as well as export more value-added products (rather than raw cotton), its spinning segment, which is the foundation stone of the industry, needs to be constantly upgraded.

(iii) With the WTO dispute settlement panel ruling against the Export Promotion Capital Goods (EPCG) scheme, importing spinning machinery will become more expensive if the scheme is withdrawn. Therefore, the import tariffs on spinning machinery should be reduced to zero.

(iv) There should be an incentive to set up a spinning unit near a traditional area of cotton cultivation so as to avoid paying high transportation costs from the cotton market to the spinning unit and from the latter to the weaving unit.

(v) Yarn exports have hitherto been deprived of benefits under the Merchandise Exports from India (MEIS) scheme. The Rebate on State and Central Taxes and Levies (ROSCTL) scheme also provided for rebate on mandi tax and other charges on the sale and transportation of raw cotton, electricity duty etc. for exports of made-ups and garments. It left out yarn exports. Since cotton yarn exports also suffer from these state and central levies at the first stage itself, the same rebate applicable to downstream products should be provided to yarn exporters. Since MEIS/ROSCTL are likely to be replaced by another scheme called the Rebate on Duties and Taxes on Export Products (RODTEP) from 1 April 2020[64], cotton yarn exports should be included in RODTEP so that they do not suffer from the incidence of unrebated local duties.

(vi) Spinning is an energy intensive industry, and the high industrial rates for power impact the profitability of exports. Cross subsidisation by industry of the domestic and agricultural demand for power should be stopped and the textile industry should be asked to pay only at commercial rates.

MANMADE FIBRE

(i) The first point raised concerned the inadequate domestic availability of (and the high import tariffs as well as anti-dumping duty on) Purified Terephthalic Acid (PTA), a key raw material for making polyester staple fibre. Similarly, Viscose Staple Fibre from Indonesia and China also attracts an anti-dumping duty roughly equivalent to 5% ad valorem. The import and anti-dumping duties paid at the border, along with the delays in obtaining a refund/credit of GST significantly erodes competitiveness for exports of yarn as well as manmade fibre (MMF) downstream products, unless the MMF is imported duty free against an Advanced Authorisation Scheme (AAS) licence.

(ii) A related point is the disparity between the GST rates for MMF products which, unlike for cotton products, has led to an inverted duty structure. Manmade fibre, filament/yarn and fabrics attract 18%, 12% and 5% GST whereas cotton fibre, yarn and fabric all attract a uniform 5% GST. It was strongly recommended that all MMF products should also attract 5% GST in order to make the tax structure fibre neutral and reduce the working capital requirements.

[63] http://texmin.nic.in/schemes/technology-upgradation-fund-scheme

[64] https://economictimes.indiatimes.com/news/economy/policy/finance-minister-announces-new-tax-refund-scheme-easy-credit-to-boost-exports/articleshow/71129550.cms?from=mdr

(iii) Rayon grade wood pulp (RGWP) or softwood dissolving pulp is not available in India due to its tropical climate and has to be imported from South Africa, Canada, Brazil, Sweden, USA etc. The import tariff on this product is 2.5%, whereas the import tariff for the downstream product Viscose Staple Fibre under the ASEAN FTA is also 2.5%. In order to address the inverted duty structure problem, the import tariff on RGWP should be brought down to zero. This will help domestic producers of VSF and bring down prices while not affecting any upstream industry.

(iv) The other points made were similar to points (ii), (iii) and (vi) related to cotton yarn.

2.2.2.ii Fabrics

(i) A major problem facing our fabrics sector is the obsolescence of looms used by the weaving units. While the leading exporters in the textiles sector have installed high speed shuttleless looms in large weaving units, more than 75% of our looms are shuttle looms and about 60% of our fabrics are woven in the powerlooms sector.[65] In order to modernise the weaving sector, large scale investments are needed and capital subsidies for the investments are also a must. The Amended Technology Upgradation Funds Scheme (ATUFS) is difficult to access because of its complicated procedures, and the percentage as well as the upper ceiling for subsidies under ATUFS is also pegged low.[66] Thus, a revision of the ATUFS norms as well as its procedures are imperative for modernisation of the sector.

(ii) Shuttleless looms are quite expensive, and apart from a few low speed shuttleless looms being manufactured in India, all the high-speed ones have to be imported either from Europe or China. Import tariffs on such looms raises costs by a significant amount. Since the EPCG has recently been ruled as WTO non-compliant and may be withdrawn, the import tariffs on high speed shuttleless looms should be brought down to zero in order to encourage investments in such looms.

(iii) Another set of problems facing the sector is the lack of scale. An average powerloom weaving unit in the SME sector could have anything between 4 and 10 looms. The rate of industrial power available to the organised mills/ large scale sector is approximately Rs 7-8 per unit whereas for powerloom/SME weaving units in some states like Maharashtra it is as low as Rs 3.25 to Rs 3.75 per unit.[67] This provides a perverse incentive to investors to hive off units and set up new ones as soon as they approach the ceiling for investments as a single SME. While some consolidation of the weaving units to obtain scale has started taking place autonomously, a policy initiative needs to be taken to give it a decisive push. Larger units should also get power at the same rate as SME units.

(iv) Fabric exports were getting MEIS at 2%. However, ROSCTL[68] did not provide for any rebate for fabrics. Since ROSCTL is likely to be replaced by RODTEP with effect from 1st April, 2020 with the termination of the MEIS, fabric exports should be eligible for the rebate of all unrebated duties and taxes paid under RODTEP.

(v) Technical textiles is one of the fastest growing segments in international trade. In order to take a

[65] http://texmin.nic.in/sites/default/files/PowerTex%20India%20Brochure%20English.pdf
[66] http://texmin.nic.in/schemes/technology-upgradation-fund-scheme: Revised guidelines dated 2 August, 2018
[67] https://timesofindia.indiatimes.com/city/surat/power-loom-sector-wants-electricity-tariff-slashed/articleshow/65220002.cms
[68] http://egazette.nic.in/WriteReadData/2019/199440.pdf

share of the global market in this segment, R&D efforts need to be stepped up significantly.

2.2.2 iii Fabric Processing

(i) Along with weaving, processing is one of the weakest links in the value chain of the T&C sector. Apart from the captive processing units in our composite mills (which are also used sometimes to process fabrics made by outside units), our powerloom and handloom units have to rely mainly on standalone processing units. It has been estimated by the India Brand Equity Fund (IBEF) that there are around 200 processing units in composite mills and around 2100 standalone ones.[69] Importantly, most of the standalone units are small and located near weaving clusters with a pronounced concentration around a few places such as Erode, Coimbatore, Ahmedabad and Surat. The major problem with our processing segment is the lack of scale and technology. Because of small lots being processed at one go and the use of older technology, there are variations in the colour and other characteristics of the processed fabric, which is a serious handicap for our made-up and clothing industries. This weakness prevents the acceptance of large orders. According to a rough estimation, a good state-of-the-art processing unit costs between Rs 80 crore and Rs 100 crore.[70] In order to facilitate setting up such modern, large scale units, the present ceiling for subsidies in the ATUFS has to be modified to provide a higher percentage of capital subsidy as well as a higher ceiling for subsidies to a particular entity.

(ii) The working capital requirement for Process House (PH) is different from other segments of the industry. In order to be viable, PHs must engage in job work to the extent of 90%. They require time to be set up, carry out R&D, stabilise their processes and build up a reputation. This takes between 3 and 5 years. Processing machinery also has a life span of about 20 years, which is more than that of the other textile industry segments. The repayment period of 7-10 years for the bank loans is inadequate for PHs and it should be extended to at least 15 years to attract large investments in the segment.

(iii) Processing units consume a lot of power. Hence, for large units, the power rates must be the same as for small units to enable upscaling of the industry.

(iv) Environmental clearances are often a problem with new processing units. Though the Integrated Processing Development Scheme (IPDS) has been introduced by the Government[71] to provide Common Effluent Treatment Plants (CETPs) for small units located in a cluster, very few of these have been sanctioned till date. It was suggested that a few Mega Textiles Parks (with units spanning the entire gamut from yarn to clothing) should be set up in or near coastal areas of major cotton/ MMF producing states with nearby port facilities, with the fully treated effluent from large CETPs being discharged into the sea. Setting up such Mega Textile Parks would simplify the sourcing of raw materials, reduce transportation costs, help in achieving scale for processing units and cut down on delays in effecting final shipments of downstream products.

[69] https://www.ibef.org/download/Textiles_Apparel_220708.pdf
[70] Estimate provided by Shri Dharmendra Goyal, Managing Director, Shreedhar Cotsyn Pvt. Ltd
[71] https://www.indiafilings.com/learn/ipds-scheme/

2.2.2.iv Made-ups

(i) Some of the large volume export items in this category are home furnishings, cotton terry towels, terrycloth robes, table and kitchen linen and bedlinen. In value terms, a bulk of our exports of made-ups is being effected by our composite mills. The rest are being produced in the SME sector. Two major problems of the segment-the lack of scale and the non-uniformity of quality in the SME sector-constrain our exports severely. The ceiling on Capital Investment Subsidy (CIS) for made-up units under ATUFS needs to be raised suitably in order to attract investments in the made-ups segment, because it is quite capital intensive. Though the CIS percentage has been raised to 25% vide the employment-linked ATUFS scheme announced on 10th January, 2017[72], the procedures for accessing the CIS are still very cumbersome and time consuming.

(ii) In order to build up a strong export base in MMF or cotton-MMF mixed made-ups for products like bedspreads, curtains, sofa covers, automobile seat covers etc., the imports of MMF/ blended fabrics need to be made hassle free, especially for the SME sector. Exporters complained that getting the Export Obligation Discharge Certificate (EODC) from the DGFT and getting the bond returned by the customs officials (for the same imports made against the Advanced Authorisation Scheme) requires several visits to the offices and ultimately middlemen have to be engaged to facilitate the process. This costs money and time and acts as a deterrent to acceptance of export orders in many cases.

(iii) High power rates erode global competitiveness and cross-subsidisation of power at the cost of the textile industry must stop. Moreover, differential rates of power for small scale units and large units militate against the scaling up of manufacturing units from the SME to the large sector.

(iv) Made-ups is a labour-intensive segment and the cap on overtime under Section 51 of the Factories Act needs to be amended to allow 60-hour work weeks.

(v) The segment also suffers from the lack of scale and technology in the upstream weaving and processing segments. Thus, if we aim to export more value-added products by way of made-ups and garments, we need to prioritise the modernisation of the fabric weaving and processing segments.

2.2.2.v Clothing

(i) The primary problem faced by the segment is the lack of scale.[73] For example, Bangladesh, which is the second largest clothing exporter in the world (it exports almost twice as much as India), has many factories employing more than 5000 workers. In comparison, we have only a handful of clothing factories with more than 3000 workers. This prevents us from servicing large orders from global chains like H&M, Target, Gap etc. It was suggested that a policy should be put in place to proactively encourage investments in large units, with the state Governments playing a facilitating role in providing land, assured power and connectivity. The Central Government would also need to modify the ATUFS to meet the capital subsidy requirements for large scale units to be set up. The

[72] http://texmin.nic.in/schemes/technology-upgradation-fund-scheme
[73] https://www.ibef.org/download/Textiles_Apparel_220708.pdf

Scheme for Production and Employment Linked Support for Garmenting Units (SPELSGU) under ATUFS, announced on 25th July 2016,[74] enhances the CIS to 25% overall and raises the ceiling to Rs 50 crore. However, the procedures established in the scheme to access the subsidy are cumbersome and need to be modified suitably.

(ii) The segment suffers from the lack of scale and technology in the upstream weaving and processing segments.

(iii) The segment also faces the problems of low productivity and high attrition rates. The comparatively high wages around metropolitan cities such as Delhi, Mumbai, Bengaluru and Chennai and the use of large numbers of migrant workers from lower income states in the east and northeast also contribute to the high attrition rates.

(iv) The cap on overtime stipulated under Section 51 of the Factories Act is a key negative factor for the segment.

(v) Inspections by different agencies on separate dates also leads to disruptions and an overall loss of productivity. It was suggested that a coordinated approach like the one adopted by the Government of Telangana, wherein only three annual joint inspections are carried out by state agencies, could be a way to minimise disruptions.

(vi) The global fibre composition of clothing is about 70:30 (MMF:cotton) whereas it is the reverse for India. As a result, exports are mainly for the spring and summer seasons, with large layoffs for about 4-6 months of the year. Conversely, other countries are stitching garments made of MMF or blended fabrics and supplying for autumn and winter seasons as well. A step which can help boost MMF fabric production in the country is to make the GST duty structure fibre neutral (vis-a vis-cotton) and follow the same rates from fibre to fabrics.

(vii) Until we can make world class MMF fabrics fit for clothing, we will have to rely on MMF fabric imports, mainly from China. Because of China's R&D effort to improve its fabrics and processing, many large buying houses from abroad specify not only the fabric but also the Chinese factory from which to buy it while placing an order on a clothing manufacturer in India. The same phenomenon is observed in Bangladesh and Vietnam as well. In order to make the import of fabrics for re-exports hassle free, the suggestion was made that AAS needs to be streamlined and the discharge from the bond made quicker and smoother. The problems enumerated in getting the EODC issued by DGFT were similar to the problems mentioned by the made-ups manufacturers. In order to make the import of fabrics for re-export as made-ups and clothing, it was suggested that the Pass Book system[75], which Bangladesh has adopted, could be introduced.

[74] http://texmin.nic.in/schemes/technology-upgradation-fund-scheme
[75] http://cbc.gov.bd/uploadsfiles/154_1985.pdf

2.3 Analysis of Suggestions Received from Stakeholders

2.3.1 Horizontal Issues

(i) Delays in getting GST, ROSL, Duty Drawback-This is a serious problem, which is more of an issue for smaller exporters rather than for the larger ones. The latter have much better documentation and also use facilitators or intermediaries to get their clearances through. The Government needs to use digital technology to the fullest extent and integrate different databases like ICEGATE, DGFT and the commercial banks (with appropriate firewalls) so that there is seamless flow of data across them and exporters are not asked to produce hard copies for verification at the whim of officials. Simultaneously, there is a need to impart more training to Customs House Agents (CHAs) and other intermediaries involved in the process of filling in export-import documentation, so that the data fed in is reliable and can help expedite refunds.

(ii) Double charging of GST on ocean freight-The problem of importers getting charged twice for GST on ocean freight has been raised consistently by the trade with officials of the Department of Revenue. This adds to the transportation costs and could be easily resolved by the concerned Department.

(iii) Single Window-A single window mechanism to provide a one stop solution for all the subsidies and other benefits that an exporting entity is entitled to, is something that the Government has been striving to provide. However, considering the difficulties and costs of introducing such a system, even the developed countries had baulked at committing to a single window system during the negotiations for the WTO Trade Facilitation Agreement. In order to provide some of the important benefits of the single window system to exporters without introducing such a system in all aspects, inter and intra Departmental coordination needs to be strengthened. Also, information in easily comprehensible language as well as FAQs need to be put up on websites of Government entities which have public dealings.

2.3.2 Vertical Issues

2.3.2 i Yarn

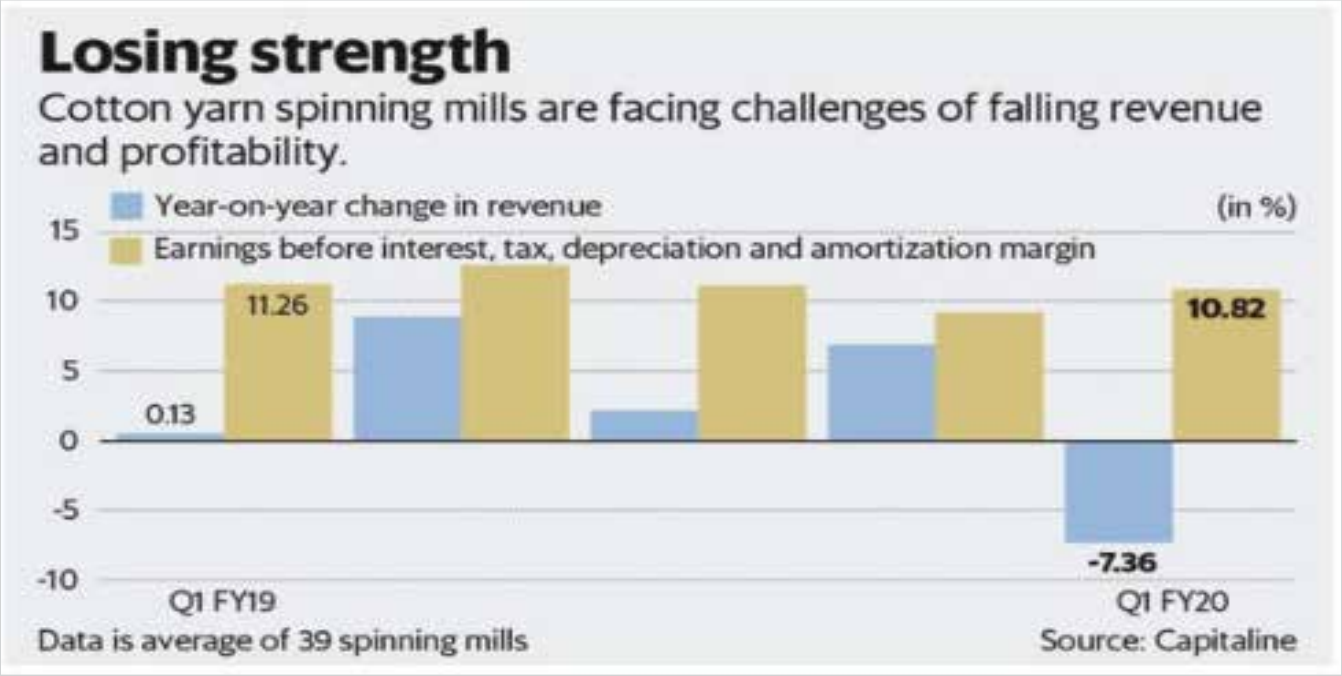
COTTON

(i) MSP greater than global prices-When the global prices for cotton are lower than the MSP for cotton, our exports of cotton yarn are affected. India's cotton exports for the first three months of the season (October 2019-December 2019) have tumbled to nearly half or are down about 45% to 10 lakh bales (each of 170 kg) during October-December 2019, from 17 lakh bales in the same period last year. Atul Ganatra, President, Cotton Association of India (CAI) has been quoted as saying, "*There were multiple factors responsible for the decline in exports in the first three months-October-December 2019. India's domestic prices were higher than international prices because India had a very thin crop last year.*" This impacted India's cotton exports, which fell by nearly half in comparison to last year.[76]

[76] https://www.thehindubusinessline.com/economy/agri-business/cotton-exports-fall-to-nearly-half-on-higher-domestic-prices-during-october-december-2019/article30495320.ece

The international cotton price has plunged 28.3% in the past one year. In contrast, domestic prices have been firm during the period.[77] The cotton trade has seen sharp fluctuations in the crop size and consequently in the prices over the past one year. The 2018-19 crop stood at 312 lakh bales, which was a record low against the 365 lakh bales reported in the previous year.[78] It is not surprising that spinning mills are weighed down by high raw cotton prices. Adding to this is the impact of tight liquidity faced by small and medium mills, which account for a major portion of our installed capacity.[79] Data from Capitaline on 39 spinning mills shows (Figure 2.1) that the net revenue in the June quarter contracted by about 7.4% from the year-ago period. The average EBITDA (Earnings Before Interest, Tax, Depreciation and Amortization) as a percentage of sales also contracted by about 50 basis points, though many mills have been struggling.[80]

Figure 2.1: Recent Trends in Revenues and EBITDA Margins of Spinning Mills in India



Source: CAPITALINE

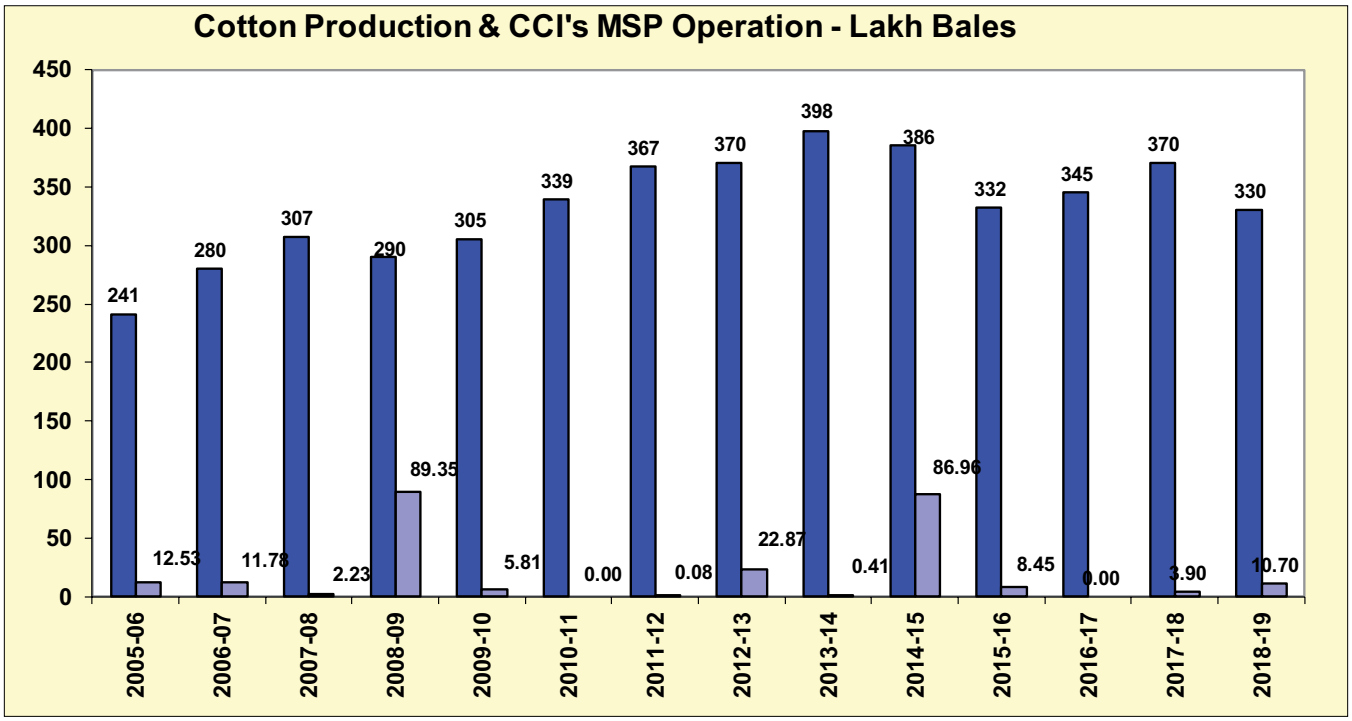
For a longer time period, the chart below (Figure 2.2) shows the domestic production and procurement by State Government agencies and the Cotton Corporation of India (CCI) from 2005-06 to 2018-19. In these 13 years, apart from 2008-09 (30.81% procurement), 2012-13 (6.18%) and 2014-15 (22.53%), the procurement percentage vis-a-vis total production was low and varied from nil to 5.2%, which was not significant. During these years, the exports of cotton were also substantial, indicating a price differential between MSP and global prices.

It can therefore be concluded that barring 2019-20, the MSP has not exceeded global prices and did not harm cotton yarn production over the years. However, since the MSP is either steady or goes up over time, if the global cotton price were to fall in certain years our MSP could exceed the global

[77] http://www.caionline.in/articles/spinning-mills-wedged-between-drop-in-yarn-demand-high-cotton-prices
[78] ibid
[79] ibid
[80] ibid

price. Thus, the recommendation of the industry to either have a stock cum price stabilisation fund or introduce a direct benefit transfer scheme for cotton farmers in order to reduce price volatility in cotton in the future is worth serious consideration.

Figure 2.2: Cotton Production and CCI's MSP Operations



Source The Cotton Textiles Export Promotion Council (TEXPROCIL)

(ii) Justification for providing capital subsidies to the spinning segment under ATUFS

The spinning segment is the most modernised part of our textile value chain. However, let us consider this reality in perspective. First, let us take a look at our capacity in comparison to China and a few other leading yarn-producing countries. Table 2.3 provides the figures[81] from 2018.

Table 2.3: Comparison of India's Spinning Capacity with Key Competitors

Country	Air-Jet Spindles	Rotors	Short-Staple Spindles
Bangladesh	11,800	299,000	13,500,000
China	**204,300**	**3,400,000**	**92,000,000**
India	**18,100**	**900,000**	**53,000,000**
Indonesia	22,400	230,000	12,250,000
Pakistan	4,200	198,800	13,409,400
Vietnam	7,000	180,000	7,050,000
Brazil	12,000	383,600	4,268,200
USA	19,500	303,000	870,000
WORLD	**385,630**	**8,141,600**	**230,697,600**

Source: The International Textile Manufacturers Federation (ITMF)

[81] https://www.itmf.org/publications/statistics-publications/international-cotton-industry-statistics-icis-2020 : International Cotton Industry Statistics, Vol. 61/2018

It needs to be noted that China now has 53% of the air-jet spindles (introduced in the 1980s) in the world, while India has only 4.7%. Air-jet spindles have a high output and produce high quality yarn. As far as short-staple spindles are concerned, India has 53 million of these whereas China has 92 million.

These short-staple spindles were installed in India in a major way only from the late 1980s and it has been estimated that about 15 million of our 53 million spindles are more than 15 years old, with the industry norm for replacement being 7-8 years.[82] Consequently, despite having the second largest spinning base in the world, if we rest on our laurels, we are in danger of becoming obsolete within the next decade or so. We thus need to keep up our efforts at modernisation, especially regarding the installation of air-jet spindles. TUFS and its subsequent revised versions had enabled the spinning segment to attain global competitiveness in the past, and it should not be closed now for further modernisation of the industry. Thus ATUFS should be opened up again for the spinning industry.

(iii) Spinning machinery to be imported at zero import tariff -Since ATUFS is basically a capital subsidy scheme for investments, it does not make sense to charge import tariffs for bringing in machinery from abroad, especially when machinery of a comparable quality is not being manufactured in the country. Charging import tariffs would amount to taking back with one hand (at least partially) what the other hand is giving. With the imminent withdrawal of the EPCG scheme, import tariffs on spinning machinery should be brought down to zero in order to encourage investments in the segment.

(iv) Incentive for locating spinning units close to cotton growing centres -High transportation costs should automatically incentivise the setting up of spinning units close to centres of cotton production with the passage of time. A case in point is the example of a large company, which had planned to set up the largest cotton yarn factory in the country with a million spindles in Gujarat (a leading cotton producing state) but had to abort its plans after crossing the 700,000 mark because of certain regulatory problems. No policy intervention appears to be required in this matter.

(v) The inclusion of cotton yarn in RODTEP-In the light of the adverse verdict given against MEIS by the WTO dispute settlement panel, MEIS was to be completely withdrawn for all sectors of the industry w.e.f 31 March, 2020 and the RODTEP scheme was to take its place from 2020-2021. Because of the uncertainty about budgetary support in 2020-21 following the unprecedented COVID-19 pandemic, it is not clear whether RODTEP would be introduced from 2021 or later. Since cotton yarn was not included in MEIS, it might not get included in RODTEP on its own. However, the state and central levies suffered by cotton made-ups and clothing on account of raw cotton being the basic raw material are likely to be rebated on the principle that no domestic taxes should be exported. On similar lines, both cotton yarn and cotton fabrics should also be included in RODTEP.

(vi) High industrial rates of power due to cross-subsidisation need to be reduced -The current exports scenario is based on global cost competitiveness, where the profit margins are only around 5% on average. In such circumstances, if a key input cost such as that of power is high, it seriously erodes the competitiveness of an industry. Thus, power rates should be rationalised and not be burdened with the cross subsidisation of other sectors.

[82] Submission to the Ministry of Textiles made by the Association of Man-made Fibre Industry of India on 20 November, 2019

MANMADE FIBRE

(i) Facilitating the import of PTA and viscose staple fibre -The anti-dumping duty on PTA has already been removed as per the recent budget announcement.[83] However, the benefit of lower tariffs does not appear to have been passed on to the user industry in the case of PTA, because the three domestic manufacturers still operate on the principle of international price parity.

(ii) GST rate revision for MMF and MMF yarn -The GST rate structure for MMF fibre, filament/yarn and fabrics is currently 18%, 12% and 5%[84] whereas for all non-MMF fibre products it is 5%. In order to bring down the working capital requirements for the exports sector and encourage MMF product exports, the inverted duty structure for MMF products needs to be addressed. The industry demand for a 5% GST rate across the board for MMF products, based on the same rationale as for cotton products, is well justified and should be adopted. This has also been recommended a few months ago by the Committee of Secretaries to the Government.[85]

(iii) Reduction in the import tariff on RGWP - Since RGWP is not produced in India and it is the basic raw material for making viscose staple fibre, the import tariff on the product should be brought down to zero from the current level of 2.5%.

(iv) On the other suggestions, which are similar in nature to suggestions for cotton yarn, there is no need for further analysis. The findings related to cotton hold for manmade fibre also.

2.3.2 ii Fabrics

(i) Obsolescence of weaving looms, achieving scale and ATUFS modification - In 2016-17 the number of looms installed in the country was 68,740 for the 205 composite mills and 175 non-SSI exclusive weaving mills taken together and 24,86,418 for the 3,85,596 powerloom units.[86] As a study of the National Productivity Council (2013)[87] carried out on behalf of the Ministry of Textiles points out, many of the shuttleless looms are in the powerloom concentration areas of Bhiwandi, Ichalkaranji, Erode, Surat and Bhilwara. The study estimated that the powerloom sector had 1,05,000 shuttleless looms in 2010-11, many of which had been bought second hand under TUFS/RTUFS. The study also found that 75% of shuttle looms in the powerloom sector were obsolete and outdated with a vintage of more than 15 years. Under ATUFS, capital investment subsidy for second-hand machinery, including looms, is not permitted. The comparative figures in Table 2.4 below brings out the level of obsolescence of the Indian weaving industry[88] vis-a-vis China, the figures reflecting the machinery installed in recent years. If we want to increase our exports of fabrics, made-ups and clothing, we need to aggressively promote the installation of shuttleless looms, especially high-speed air jet looms.

[83] https://economictimes.indiatimes.com/industry/indl-goods/svs/chem-/-fertilisers/abolition-of-anti-dumping-duty-on-pta-a-step-in-the-right-direction-sima/articleshow/7384

[84] https://economictimes.indiatimes.com/industry/cons-products/garments-/-textiles/secretaries-group-suggests-reduced-manmade-fibre-imports-changes-in-duty-to-boost-local-production-smrit-irani/articleshow/72491503.cms

[85] ibid

[86] http://www.simamills.in/wp-content/uploads/2017/12/Textile-Industry-At-a-Glance.pdf :Table166

[87] http://ministryoftextiles.gov.in/sites/default/files/StudyReport-SecondHandloomShuttleLoom.pdf

[88] https://www.itmf.org/publications/statistics-publications/international-cotton-industry-statistics-icis-2020 : International Cotton Industry Statistics, Vol. 61/2018

Table 2.4: Installed Machinery in Indian Weaving Industry vis-a-vis its Key Competitor Countries

Country	Shuttle Looms	Shuttleless Looms
Brazil	19,900	39,900
Mexico	31,500	35,000
Bangladesh	17,000	45,000
China	**280,000**	**875,000**
India	**45,500**	**125,000**
Indonesia	197,000	76,000
Pakistan	375,000	38,700
Vietnam	15,000	6,800
WORLD	**1,231,490**	**1,666,150**

Source: The International Textile Manufacturers Federation

Capital subsidy for weaving machinery is already included in ATUFS. However, the criteria[89] for the weaving sector are excerpted in Table 2.5 below.

Table 2.5: Capital Subsidy for Weaving Machinery in India

Sl. No.	Segment	Rate of Capital Investment Subsidy (CIS)	CIS per individual entity
2.	Weaving for brand new Shuttle-less Looms (including weaving preparatory and knitting), Processing, Jute, Silk and Handloom	10% on eligible machines	Rs 20 crore
3(a)	Composite unit/Multiple Segments-If the eligible capital investment in respect of Garmenting and Technical Textiles category is more than 50% of the eligible project cost	15% on eligible machines	Rs 30 crore

Source: Ministry of Textiles

Shuttleless looms are expensive.[90] If we aim to achieve scale in fabric manufacturing, there would be around 50-100 looms in a unit. Considering all the costs, the Government needs to modify the ATUFS criteria and have a much higher limit on the subsidy, which is at present pegged at Rs 20 crore. The Capital Investment Subsidy (CIS) percentage, at 10%, is far lower than available for the electronics industry (MSIPS), where it was kept at 25% in order to attract investments.[91] The same level of 25% capital subsidy has been retained in the incentive package for the electronics industry announced on 21 March, 2020.[92] Bearing in mind the strategic importance of the weaving segment in driving the growth of fabric, made-ups and clothing exports, the CIS percentage as well as the upper ceiling on subsidies need to be revised upwards significantly, at least to 25% and Rs 50 crore respectively, in order to enable the setting up of large weaving factories.

(ii) Import tariffs should be at zero - While providing CIS for imports of shuttleless looms, it makes little sense to charge import tariffs on such machinery for the simple reason that the Government

[89] http://texmin.nic.in/schemes/technology-upgradation-fund-scheme: ATUFS Resolution dated 2 August, 2018
[90] https://connect2india.com/global/Shuttle-less-looms-for-weaving-fabric--greater-than-30cm-wide-import-to-india/hs-code-844630/1
[91] https://meity.gov.in/esdm/incentive-schemes
[92] https://economictimes.indiatimes.com/industry/cons-products/electronics/cabinet-approves-production-linked-incentives-for-electronics-manufacturing-firms/articleshow/74746717.cms

would be taking back (as import tariff) part of what it is giving (as CIS). The EPCG scheme is likely to be phased out and export linkages with import of capital goods would no longer be WTO compliant. Moreover, since there are very few weaving factories manufacturing exclusively for exports, a broad-based modernisation of the weaving segment is called for. Apart from a few low speed rapier looms manufactured in the country, all high speed shuttleless looms have to be imported. In this light, the import tariffs on shuttle less looms should be brought down to zero as soon as the EPCG scheme is withdrawn. A fact which must be borne in mind is that for the years 2016-17 and 2017-18, the total revenue foregone under the EPCG Scheme for imports of all machinery (including for textiles and clothing) was only Rs 10,145 crore and Rs 10,986 crore respectively[93]. Thus, bringing down import tariffs to zero for textiles and clothing is not likely to have very serious revenue implications.

(iii) Differential power rates to be removed -High power rates for the large-scale sector and subsidised power for the small-scale sector has acted against the achievement of scale in the weaving segment. The differential power rates provide a perverse incentive to keep weaving units small. If the fabric segment is going to contribute to the growth of our made-ups and clothing exports, it is imperative to achieve scale in the weaving segment, which will enable the industry to produce large quantities of fabric of uniform quality and conform to global standards. This anomaly needs to be rectified and consolidation of existing powerloom units needs to be encouraged by taking appropriate policy measures at the state and central levels.

(iv) Inclusion in RODTEP -Fabric exports have been left out of ROSCTL benefits, though they used to get 2% benefits under MEIS. It is important to rebate the unrebated State and Central taxes and duties suffered during fabric production. RODTEP should therefore include fabric exports.

(v) Technical Textiles -The global technical textiles market is the fifth largest segment of T&C and was estimated to be worth USD 145 billion in 2015, with a CAGR of 4%. China (24%), USA (10%), Germany (9%) and Korea (4%)[94] are the leading exporters of technical textiles because of the significant R&D effort that they have put in. The 2020-21 budget set up a National Technical Textile Mission with an outlay of Rs 1480 crore.[95] However, the primary aim of the mission appears to be import substitution. Considering the large size of the international technical textiles market and its CAGR, we need to build a strong export orientation into the Mission so that our industry can also benefit from the external market.

2.3.2 iii Fabric Processing

(i) Scaling up and modification in ATUFS - Processing attracts the same benefits as stand-alone weaving units under the ATUFS Resolution dated 13th January, 2016 of the Ministry of Textiles. According to estimates, the cost of putting up a large composite processing unit is between Rs 80 crore and Rs 100 crore.[96] Since this is the weakest link in our textile value chain, all out efforts

[93] https://cag.gov.in/sites/default/files/audit_report_files/Chapter_1_Customs_revenue_of_Report_No.41_of_2017_Compliance_Audit_on_Department_of_Revenue_%E2%80%93_Customs_Union_Government.pdf :(Table 1.8)
[94] https://www.textiletoday.com.bd/indian-technical-textiles-industry-growing-rapidly/ : Al Mahfuz M.A. (2018): Why Indian technical textiles industry growing rapidly
[95] https://economictimes.indiatimes.com/industry/cons-products/garments-/-textiles/budget-2020-fm-proposes-national-technical-textile-mission-at-rs-1480-cr-outlay/articleshow/73834043.cms
[96] Estimate provided by Shri Dharmendra Goyal, M.D, Shreedhar Cotsyn Pvt.

must be made to bring it up to speed. To this end, an upward revision in the ATUFS CIS norms, both in terms of the percentage of CIS (10% currently) as well as the ceiling on total CIS (Rs 20 crore currently), to 25% and Rs 25 crore, respectively, is called for.

(ii) Bank loan repayment period to be extended - The machinery for PHs have a longer life span compared to other segments of the industry. PHs also have to do a certain amount of R&D before they establish themselves firmly. Thus, the demand for a longer bank loan repayment period needs to be looked at carefully along with the profit projections for a new large-scale PH.

(iii) Differential power rates - The issue of differential power rates for a unit in the SME sector vis-a-vis the large-scale sector has militated against the achievement of scale in processing operations. This artificial distinction and cross-subsidisation need to be rectified for scaling up and consolidation of the existing units as well as for setting up large new units.

(iv) Setting up Mega Textile Parks/ large Export Hubs - Environmental clearances take a long time and sometimes the final outcome is unpredictable. Rather than obtaining individual clearances, it is always preferable to obtain it collectively for a cluster. To this end, the setting up of a few Mega Textile Parks (with an export thrust) covering the whole value chain from fibre to clothing, with environmental and other clearances being facilitated by the promoter/state Government is an attractive proposition. This will act as a large export hub, about which there is a separate discussion in the paper on Export Hubs. The Telangana[97], A.P[98], Maharashtra[99] and Gujarat[100] State Governments have initiated steps to set up large textile parks, based on the above concept. The efficacy of these schemes will be tested in their ability to attract new investments.

2.3.2 iv Made-ups and Clothing

Since the problems of the made-ups and clothing segments are quite similar and overlap to a great extent, we examine them together.

(i) Modification of ATUFS - Achievement of scale can take place through the consolidation of existing units and/or setting up of new units. The latter would require incentivisation through schemes like ATUFS. Though the SPELSGU under ATUFS provides overall CIS of 25% for clothing and made-ups units, the first 15% is available on installation of machinery (up to a maximum of Rs 30 crore). The balance 10% (up to a maximum of Rs 20 crore) is released only if in the following three years the unit has attained the employment targets listed in its Detailed Project Report, which should be at least 70 persons per Rs 1 crore of investment. In addition, a minimum ratio of 1:3.5 for additional investments to additional turnover has also been specified for SPELSGU. Finally, the subsidies are released only after a Joint Inspection Team (JIT) has carried out an inspection and submitted a report.

A status report on the pendency of JIT inspections[101] is in Table 2.6 below.

[97]Telangana– https://www.tgnns.com/telangana-new-district-news/telangana-textile-apparel-incentive-scheme-2017/2017/08/18/
[98] Andhra Pradesh – http://www.apindustries.gov.in/APIndus/Data/Industry/Textile%20Policy_April_2_2015.pdf
[99] Maharashtra – https://mahatextile.maharashtra.gov.in/OrdersandGRList.aspx
[100] Gujarat – http://www.ic.gujarat.gov.in/documents/pagecontent/gujarat-textile-policy-2012.pdf
[101] http://texmin.nic.in/schemes/technology-upgradation-fund-scheme

Table 2.6: Progress of Physical Inspection Under TUFS

Progress of physical inspection of accounts under previous version of TUFS as on 13 March 2020 at 11.00 AM						
Sr. No.	**Particulars**	**MTUFS LIST-I**	**MTUFS LIST-II**	**RRTUFS**	**RTUFS**	**Total**
1	Accounts for which claims lodged online by banks	1029	2178 *	2159	556	5922
2	Accounts for which documents uploaded by banks	323	517	1821	345	3006
3	Accounts returned to banks	198	463	1499	223	2383
4	Accounts found fit for physical inspection	196	116	1202	209	1723
5	Accounts assigned to JIT by ROTXC	39	24	447	42	552
6	JIT Report uploaded	19	19	327	31	396
7	JIT Report examined by ROTXC	5	8	111	2	126
*-Documents can be uploaded even when claims are not lodged in case of MTUFS-List-II account						

Source: Office of the Textile Commissioner

As is evident, the inspections by the JIT of applications under the Modified TUFS List I and List II, Revised TUFS and Revised Restructured TUFS themselves are not complete. Hence the offtake of subsidies under SPELSGU of ATUFS (announced in 2016) may not even have started. The budget allocation for ATUFS for FY 2018-19 was slashed to Rs 700 crore because of the poor offtake of subsidies during FY 2017-18.[102] Thus, there seems to be something seriously wrong with the implementation of this ambitious scheme.[103] Obviously, the procedures laid down for implementation need to be revisited and appropriate modifications must be introduced to enable speedier implementation.

Since a similar scheme is under implementation for made-ups, the said scheme would also have to be modified radically to enable quick implementation.

(ii) Import tariffs for machinery to be at zero - Since EPCG is likely to be phased out and sewing machines and other accessory machines required for the clothing/made-ups export industry are not manufactured in India, the import tariffs on such machinery should be reduced to zero. Additional justification for this recommendation has been provided in the analysis for the fabrics sector.

(iii) Modernisation of the weaving and processing segments - The lack of a modern weaving and fabric processing sector acts as a huge handicap which restricts our exporters from accepting large orders. It has been estimated that 60% of the output of our powerloom sector is exported either as fabrics, or made-ups or clothing.[104] The fragmented and small-scale nature of our weaving segment leads to quality issues and realisation of low values for our products. Thus, if we are to export more made-ups and clothing and realise greater value per unit, we cannot do so without modernising and scaling up our weaving and processing segments.

(iv) Easing the import procedures for MMF fabrics - In order to export for all the four seasons in the garments calendar and diversify our made-ups exports basket from predominantly cotton

[102] https://timesofindia.indiatimes.com/city/surat/textile-sector-upgradation-hits-a-roadblock/articleshow/72230673.cms
[103] https://www.tribuneindia.com/news/archive/ludhiana/textile-industry-has-tough-time-availing-of-scheme-benefit-699056
[104] http://texmin.nic.in/sites/default/files/PowerTex%20India%20Brochure%20English.pdf

products, we need to simplify the procedures for the import of MMF and fabrics. The Pass Book scheme of Bangladesh[105] has been found to lead to significant revenue losses on account of the diversion of garments into the domestic market.[106] It cannot therefore be held to be a good example. DGFT had also tried out a similar scheme in the past but had to terminate it on account of widespread misuse.[107] There is a scheme called the Advance Authorisation for Annual Requirement[108], which is available to exporters who have a proven track record of at least two years. This scheme is quite similar to the Pass Book scheme but is only available to exporters who have been exporting for some time. For new exporters or exporters who have never used the AAS before, its procedures need to be simplified and Export Obligation Discharge Certificates need to be issued in a time-bound manner by the DGFT once the requisite proof is available online/has been furnished by the exporter. The submission of documents by the exporters for obtaining EODC from DGFT needs to be made as human interface-free as possible to reduce the time and costs involved in obtaining it.

(v) Differential power rates and cross-subsidisation of power to be removed - In order to service large orders, we need to build up scale right across the value chain of textiles and clothing. To this end, we need to remove the artificial distinction between the SME sector and the large sector and withdraw the perverse incentives to stay small. Because many of the segments of textiles and clothing consume significant amounts of power, power must be made available as close to global rates as possible to enable the industry to attain global competitiveness. This employment intensive industry should be freed of the yoke of cross subsidisation of power (which acts to its detriment), as soon as possible.

(vi) Bringing down the attrition rate of labour - A large chunk of the labour in the industry comes from the economically backward states. The migrant workers go on long leave to their home villages/ towns during important festivals and often either delay their return or do not come back at all. Consequently, there is disruption in production and difficulty in meeting the strict deadlines set by the foreign buyers. In order to avoid this, as well as to save on high wage costs in the metropolitan cities, a relocation of existing production facilities (to the extent practicable) to the hinterland as well as the setting up of new units in these hitherto untapped areas is called for. States like Jharkhand have taken the lead in attracting investments in textiles and garments through their investor friendly policies.[109] Apart from Jharkhand, a few other states like Telangana, A.P and Gujarat have also taken the initiative to offer attractive incentives to potential investors. If we are to compete with lower wage countries like Bangladesh, Vietnam, Cambodia, etc., we also need to shift our new production units to the backward, lower-cost regions of the country.

(vii) Amendment to Section 51 of the Factories Act - The made-ups and apparel export industry is seasonal, and currently employs a large number of migrant labourers. The deadlines given by the foreign buyers are often extremely tight and if there is even a minor disruption - for instance in the supply of the requisite quantity of processed fabric – it is difficult to meet the deadline for shipments.

[106] De Wulf L. and Sokol Jose B. (eds.)(2005): Customs Modernization Handbook, The World Bank, Washington D.C. (page 224)

[107] Based on discussions with DGFT officials

[108] http://dgftcom.nic.in/exim/2000/policy/hbppol1/2009-2010/chap04.htm

[109] https://apparelresources.com/business-news/sourcing/new-textile-apparel-policy-of-jharkhand-makes-the-region-more-competitive-than-bangladesh-on-wages/

Delayed shipments are subject to stiff penalty clauses and sometimes wipe out the entire profit margin for a contract. In order to avoid delays, the only recourse available to the exporters is to employ trained people for longer hours and expedite production. The limits on overtime stipulated in Section 51 of the Factories Act often pose a legal hurdle in engaging the workers for longer hours. In keeping with global trends in the industry, the overtime provisions in Section 51 need to be liberalised to enable our industry to remain globally competitive.

2.4 Conclusions

The analysis carried out and the recommendations made have been presented in Table 2.7 below and classified into short term or medium/long term, corresponding to whether they can yield benefits in the short term or will need a longer time frame.

Table 2.7: Recommendations for Textiles and Clothing

	Recommendations	Short Term	Medium/ Long Term
1.	Expedited refund of GST, ROSL, Duty Drawback	Y	
2.	GST refund of Ocean Freight	Y	
3.	Single Window		Y
4.	Cotton farmers to be provided Direct Benefit Transfer		Y
5.	Cotton Spinning Machinery to be included in ATUFS		Y
6.	Yarn exports to be included in RODTEP	Y	
7.	GST on MMF fibre, yarn and fabric to be brought down to 5%	Y	
8.	Rayon Grade Wood Pulp import tariff to be brought down to 0%	Y	
9.	Subsidy Structure for Weaving machinery under ATUFS to be revised		Y
10.	Fabric exports to be eligible for RODTEP	Y	
11.	R&D for Technical Textiles to be enhanced		Y
12.	Subsidy structure for Processing Machinery to be revised		Y
13.	Bank Loan repayment period for Processing units to be revised		Y
14.	ATUFS for garments/made-ups to be revised		Y
15.	AAS procedures to be simplified for MMF fabric imports	Y	
16.	New garment/made-ups units to be located in backward states		Y
17.	Section 51 of the Factories Act to be amended	Y	
18.	A few export oriented Mega Textiles Parks (Export Hubs) to be set up		Y
19.	Differential rates for power for SME and large sector should be removed		Y
20.	Industrial power rates for textile industry to be rationalised		Y
21.	Import tariffs for machinery for textiles and garments to be reduced to zero		Y

CHAPTER

Gems and Jewellery

3.1 Introduction

India's Gems and Jewellery (GJ) sector is one of the largest in the world, contributing 29% to the global jewellery consumption. The market size of the sector is about USD 75 billion as of 2018, and is estimated to reach USD 100 billion by 2025. There are more than 300,000 GJ players, accounting for about 7% of India's GDP and employing over 4.64 million people.[110]

Data compiled by the Gems and Jewellery Export Promotion Council (GJEPC) showed gross GJ exports from India were USD 39.68 billion in 2018-19, compared to USD 40.96 billion in the previous year.[111] The overall GJ exports are expected to decline by 5-10% in the financial year 2019-2020 compared to the financial year 2018-19 on the back of US-China trade war, protests in Hong Kong and the implementation of VAT in the Middle East.[112]

India is the world's largest centre for cut and polished diamonds in the world and exports 75% of the world's polished diamonds. Today, 14 out of 15 diamonds sold in the world are either polished or cut in India.[113] Its share in this sector has increased from around 16% to around 19% as shown in Table 3.1 below.

India is the largest consumer of gold in the world. An increasing middle-class population and increasing income levels are the key drivers of the demand for gold and other jewellery in India. India's gold jewellery exports stood at USD 6.11 billion and imports stood at USD 32.8 billion[114] after billion between 2018 and 2019. The Government of India has permitted 100% Foreign Direct Investment (FDI) in the sector under the automatic route. The USD 35.77 billion household jewellery industry will probably get a major lift through the Government's decision to allow FDI in retail. As of January 2018, the Reserve Bank of India has increased the scope of the gold-monetisation scheme by allowing charitable institutions and Government entities to deposit gold, which is expected to boost deposits over the coming months.[115] Its share of global markets which stood at 9% in 2014 has gone up to 11% in 2018.

[110] https://www.ibef.org/industry/gems-and-Jewellery-presentation
[111] https://www.business-standard.com/article/economy-policy/credit-squeeze-gst-hiccups-dent-india-s-gems-and-Jewellery-exports-in-fy19-119041900635_1.html
[112] https://economictimes.indiatimes.com/industry/cons-products/fashion-/-cosmetics-/-jewellery/gems-jewellery-exports-may-decline-5-10-this-year-gjepc/articleshow/71632672.cm
[113] https://www.ibef.org/industry/gems-and-Jewellery-presentation
[114] https://m.economictimes.com/industry/cons-products/fashion-/-cosmetics-/-Jewellery/gold-imports-up-35-5-in-first-quarter/articleshow/70651759.cms
[115] https://www.ibef.org/industry/gems-and-Jewellery-presentation

Silver jewellery, semi-precious stones and artificial jewellery are growth sectors in the international markets so India should promote the growth of this segment of its GJ base, whose global market value is USD 7 billion. Silver jewellery share in global exports have gone up marginally.

The share of synthetic stones and other precious stones in global trade has also gone up substantially showing an increase of 11% and 1.4% respectively. The other sector which showed an increase was pearls and articles of pearl.

While India's global share may have increased marginally, GJ exports from India declined by 5%[116] in 2018 due to some critical issues such as a credit crunch, delays in GST refunds, customs related issues, and high import duties on polished diamonds as well as gold.[117] Further decrease in exports is expected in the financial year 2019-2020.

Table 3.1: Change in India's share of Global exports in Different items of GJ sector

Product Code	Commodity	% share in world Exports (2014)	% share in world Exports (2018)	% change in world export share
7102	Diamonds, whether or not worked, but not	16.2	19.1	2.8
7103	Precious stones (other than diamonds) and	3.0	4.4	1.3
7104	Synthetic or reconstructed precious or semi-	3.0	13.6	11.4
7105	Dust and powder of natural or synthetic precious	0.6	0.8	0.2
7107	Base metals clad with silver, not further worked than	2.1	0.02	-2.1
7112	Waste and scrap of precious metal or of metal clad with	2.8	1.2	-1.5
7113	Articles of jewellery and parts thereof, of precious metal	9.1	11.2	2.1
7114	Articles of goldsmiths' or silversmiths' wares and parts	1.1	3.0	1.9
7116	Articles of natural or cultured pearls, precious or semi	0.2	2.4	2.2
7117	Imitation jewellery.	3.5	2.7	-0.8

Source: Comtrade database

In terms of global ranking in the overall GJ sector, India's ranking has fallen from 5th in 2014 to 6th in 2018 (See Table 3.2). Several industry representatives have pointed out that the ease of doing business is much higher in the UAE than in India. Hence imports and exports of several items of GJ go through Dubai.

In order to make India an export hub of gems and jewellery, a survey was conducted with major export players and industry representatives to gather information about the problems faced by the industry.

Recommendations from exporters and industry representatives on how India may increase its exports and transform itself into an export hub for gems and jewellery are provided from section 3.2 onwards below.

[116] https://gjepc.org/admin/StatisticsExport/698945475_Total%20Exports%20of%20Gem%20&%20Jewellery%20(2008-09%20to%202017-18).pdf
[117] All these issues would be explained in detail below.

Table 3.2: Ranking of top ten Exporters of GJ in 2014 and 2018

Ranking (2018)	Exporters (Values in USD billion)	Exports (2014)	% share in world trade	Exports (2018)	% share in world trade	Change in exports (%)	%Change (In world share)
1	Switzerland	92.2	13.1	81.2	12.5	-11.0	-0.6
2	Hong Kong, China	82.4	11.7	68.1	10.5	-14.2	-1.2
3	United States of America	64.0	9.1	63.1	9.7	-0.9	0.6
4	United Kingdom	53.6	7.6	47.4	7.3	-6.2	-0.3
5	United Arab Emirates	37.1	5.3	45.8	7.0	8.8	1.7
6	India	40.7	5.8	39.2	6.0	-1.5	0.2
7	China	63.2	9.0	20.1	3.1	-43.0	-5.9
8	Belgium	17.2	2.4	18.5	2.8	1.2	0.4
9	Canada	20.6	2.9	17.6	2.7	-3	-0.2
10	Singapore	18.2	2.6	16.9	2.6	-1.2	0.0
	Total World Trade	**701.3**			**648.3**		

Source: Comtrade

3.2 General Problems

There are certain regulations which affect every segment of the GJ sector. In addition, there are specific problems which affect different segments of the GJ sector. Identical problems may further affect the various segments of this sector differentially. This section illustrates some general problems.

For the purchase of GJ above the value of INR 2 lakh, the Government of India requires that the Permanent Account Number (PAN) card be quoted by the seller. Less than 50% of India's population possesses Permanent Account Number (PAN) card making it hard for many consumers, especially in rural areas to comply with this rule. The regulation was originally introduced to track spending and map it back to incomes reported, allowing for the identification of under-reported incomes. A mangalsutra, four bangles, a small nose pin, and rings for a bride and groom together weigh more than 100 grams and costs around Rs 3-4 lakh. GJ is considered auspicious for Indian marriage events and this rule makes it hard for many to buy it, especially in small towns and villages. The All India Gems and Jewellery Domestic Council (GJC) recommend raising the PAN card exemption limit from Rs 2 lakh to Rs 5 lakh.[118]

One of the reasons advocated for the fall in diamond exports is the popularity of Lab Grown Diamonds (LGD) vis-a-vis natural diamonds in international markets. These diamonds have adversely affected the Indian diamond industry. The value addition in the diamond industry was 40% during the year 2019-20. Merchants are expecting a fall in valued added to 33% by 2022 due to global recessionary trends. On the other hand, LGD are doing well, their exports having almost doubled over the last year. This may be because the price of LGD is 30%-50% less than that of natural diamonds, pushing the profitability of natural diamonds significantly. Many LGDs pass off as natural diamonds. In response to

[118] https://economictimes.indiatimes.com/industry/cons-products/fashion-/-cosmetics-/-Jewelery/budget-2019-gems-Jewelery-sector-seeks-cut-in-gold-import-duty-to-4/articleshow/69958655.cms?from=mdr

this the GJEPC mobilised global support to develop the technology for the detection and disclosure of LGDs; the Indian Government is also ready to support this initiative. World customs procedure recognizes the difference between LGDs and natural diamonds. This difference is embedded in the Consumer's Protection Act of several countries, and selling LGDs as natural diamonds is a punishable offense.

GJ exports are also affected by international upheavals. Shipments to Hong Kong, which comprised almost a third of India's GJ exports, fell about 17% to USD 11.1 billion in the last fiscal year as the protracted trade war between the US and China sapped demand. The fall could deepen if protests in Hong Kong continue.[119] India also failed to capitalise on the US-China trade war.

The GJ industry was hoping that US President Donald Trump's decision to impose 10% import duty on Chinese jewellery would help boost the sagging exports of diamonds and jewellery made from precious or semi-precious stones to the US from India. While China's GJ exports to the US amount to about USD 2 billion a year, India's exports have declined by 7.6% to USD 18.9 billion in the first half of the fiscal year 2019-20. With the US deciding to impose a 10% import duty on Chinese jewellery, Indian jewellers were hoping to get a portion of the Chinese export pie of USD 2 billion. However, there are no signs that Indian jewellery exports are being put on the fast track. India faces tough competition from Thailand and Vietnam, which have much friendlier business policies that take advantage of the US-China trade war.[120] If the Government fails to provide incentives to foreign investors, it could lose a large chunk of the USD 2 billion export market to competitors.

When foreigners come to India to buy jewellery, the transaction should be treated as exports and not as domestic purchases. They should therefore be able to obtain the duty refunds at the airport as is common practice. There should be a common IuD HS classification code between foreigners who come here, businesses, customs and agents which will render it easier for agents to export.

There is no mechanism to retain the money gained from exhibitions outside India. The form "D" at Indian airports allows only a limited amount of currency, and it is very difficult to exchange money if the exchangeable amount is above USD 5000. The Government should formulate a mechanism to transfer money earned abroad from bank to bank. This is not allowed even in the case of Indian banks. The Government has said that it will talk to the RBI regarding this and will come out with a solution very soon.

For silver jewellery, synthetic gemstones and cut stones, almost 80% of the raw material is imported from Thailand. These are not high value items. The Government should set a minimum limit beneath which no customs clearance is required. This will ease the business practices for small traders. For silver jewellery, of total production, 30% is exported and 70% is used for the domestic consumption. Out of the 30% that is exported, 80% has imported content. Of the 70% of domestic consumption, only 20% has imported content. This means that imports are primarily export oriented. The Government should therefore facilitate its imports.

[119] https://www.livemint.com/market/commodities/hong-kong-unrest-is-worrying-india-s-jewelers-1567603224694.html
[120] https://www.nationalheraldindia.com/national/indian-gems-and-Jewellery-industry-fails-to-take-advantage-of-us-china-trade-war

Banks do not give a guarantee on rough diamonds in India, pushing exporters to use the supplier's credit. As a result, the GJEPC and big diamond producers created a fund, requesting the Government to participate in the generic promotion of diamonds via contributions to this fund. They require an amount of USD 2.3 billion from the Government to create this fund, which will improve credit availability for diamond exporters.

It is comparatively easier to do business in Dubai than in India. The Congo sells all its consignments to Indian exporters through Dubai. As a result, it is becoming difficult for the Indian Government to tax rough diamonds in India because they arrive directly through Dubai. In India, the carat tax (125%) is being avoided. Easing bank loan conditions would make it more convenient for rough diamonds producers to directly come to India.

Transportation is the nerve knot of the GJ industry in India. Exporters in the GJ industry fall victim to the problem of not being able to fulfill the export demand for products. They also feel the absence of any professional organisation or Government counter which allows them to purchase raw materials for GJ according to their requirements. Ease of doing business is another problem. The clearance of parcels from customs and other formalities takes a lot of time. After the parcel is dispatched. it reaches the foreign country within 5-6 days. To overcome this problem, exporters dispatch their parcels from Delhi enabling delivery to the country concerned within one day. However, the parcel of such high value items is not safe.

3.3 Credit Crunch

Bank finance is the lifeline of the industry, and any decrease would see a decrease in gems & jewellery exports as well. Since the Nirav Modi-Punjab National Bank (PNB) scam broke in February 2018, the industry has been facing a liquidity crisis due to lenders tightening provisioning and fund sanctions. Banks are reluctant to lend to jewellers. Lenders started asking for collateral valued by third parties for over 100% more than the loan to ensure that only genuine players should receive the finance.[121] This has caused a working capital crunch and rise in manufacturing costs. On the other hand, the RBI can transfer unlimited funds to genuine players because it is aware that exporters buy raw diamonds in cash outside India. However, the RBI currently gives only 3-4 months of packing credit[122] to banks for the diamond exporters. The lack of finance to the industry has impacted the business. There is a possibility that the gems & jewellery exports in the financial year 2019-20 will witness a marginal decline over and above that of 2018-2019.

Banks currently charge an 11.5% commission on credit cards[123] which inflates the prices of jewellery by the same percentage, encouraging cash transactions. The industry is seeking to waive off the bank commission or reduce it to 0.20% to boost digital transactions in the GJ sector.[124] Currently, bank charges are discretionary. They should instead be consistent across all banks and waived for

[121] https://www.business-standard.com/article/economy-policy/credit-squeeze-gst-hiccups-dent-india-s-gems-and-Jewellery-exports-in-fy19-119041900635_1.html
[122] Packing credit is basically a loan provided to exporters or sellers to finance the goods' procurement before shipment. The bank will make the funds available as a letter of credit issued favoring the seller and a confirmed order for selling the goods or services.
[123] Told in interviews
[124] ibid

small shipments. An additional problem with use of credit cards arises with respect to security. Indian payment gateways necessitate 3D security. In other countries, only 2D security is required. In Indian live gateways, 2D security is not accepted. An RBI policy for virtual accounts which enables 2D security for foreign orders would help address this issue.

Indian banks regard the diamond industry as a high-risk industry; Indian exporters buy rough diamonds directly from miners in USD, either through Indian banks or through banks in Belgium and Dubai. They spend approximately USD 6-7 billion on rough diamond purchases. However, the interest rate charged on these purchases is very high due to dollar credit. In an earlier meeting in January 2019 under the chairmanship of the then Commerce Minister, the industry was expressly assured that the GJ sector will be included under the 416 tariff lines identified under the 3% interest subvention scheme. However, this has not happened yet.[125]

To export diamonds, an exporter needs to open a diamond dollar account. However, the working capital available to exporters is not in dollars. This forces them to raise the working capital in rupees, for which the interest rate is very high. The Government should charge Libor+300 points for working capital and the rupee equivalent of dollars should set the limit of borrowing.

To enhance liquidity and ease the lending process in the GJ sector, the Government of India introduced the "NIRVIK" (Niryat Rin Vikas Yojna) scheme on 14th September 2019. Under the scheme, which is also called the "Export Credit Insurance Scheme" (ECIS), the insurance cover guaranteed will cover up to 90% of the principal and interest. The cover will also include pre and post-shipment credit. The Export Credit Guarantee Corporation of India (ECGC) currently provides credit guarantee to cover up to 60% of any loss incurred. The scheme will help make Indian exports competitive and ECGC procedures exporter friendly.

In addition, a new scheme for reimbursing taxes, reduced insurance cost and ease of doing business will benefit SMEs.[126] During the budget 2020, it was announced that a scheme for exporters would be launched in 2020 to digitally refund duties levied at the central, state, and local levels. These taxes include value added tax, electricity duties, and fuel used for transportation, which are not exempted or refunded under any other existing mechanism. The move comes in the wake of the removal of MEIS which was found to violate WTO provisions. Under WTO rules, certain duties including state taxes on power, oil and water, and education cess may be refunded.[127] The scheme which replaces the MEIS is therefore WTO compatible.

3.4 Import Duty and GST

3.4.1 Import Duty

Import duty on gold has been increased to 12.5% from 10%. Since the domestic prices are already

[125] https://gjepc.org/news_detail.php?id=5129
[126] https://www.jagranjosh.com/current-affairs/nirvik-scheme-ecgc-raises-insurance-cover-for-banks-raised-up-to-90-percent-for-working-capital-loans-1568633835-1
[127] https://economictimes.indiatimes.com/news/economy/foreign-trade/nirvik-scheme-to-provide-high-insurance-cover-for-exporters-fm/articleshow/73833892.cms?from=mdr
[128] https://economictimes.indiatimes.com/industry/cons-products/fashion-/-cosmetics-/-Jewelery/budget-disappoints-Jewelery-industry-fears-30-rise-in-grey-market/articleshow/70093533.cms?from=mdr
[129] ibid

at multi-year highs due to a weak rupee and higher international prices, the new decision will add to the burden on buyers. The hike in customs duty and the 3% GST will present a total tax incidence on gold at about 15.5%, which will lead to higher prices for gold in the country.[128] According to some estimates, this will increase the size of the grey market for gold by 30%.[129]

Demand for Indian jewellery comes majorly from the UAE and primarily serves the South Asian consumer base. In 2016, around USD 4 billion worth of gold jewellery was exported to the UAE, accounting for more than half the total Indian jewellery exports. Gold jewellery has not only been purchased by Indians living in the UAE, but also by Indian tourists who visit Dubai and carry it back home due to the cheaper price of gold. In January 2017, the UAE Government introduced a 5% import tax on jewellery that has led to a slowdown in the export of gold jewellery from India for consumption in the UAE.[130] This presents a case for reducing the import duty to zero to boost both the domestic market and export sales. In response to the problems imposed by high duties, IGST rates have been reduced from 10% to 5%.

It is not just the import duty on gold, but also the duty on cut and polished diamonds that was increased in 2014-2015. This has had a dampening effect on both the export and import of cut and polished diamonds as shown in Table 3.3 below.

Table 3.3: Exports & Imports of Cut & Polished Diamonds

Year	Exports US$ in Million	Imports US$ in Million	Import Duty
2008-09	15156.00	8982.00	0
2009-10	19355.56	11609.86	0
2010-11	30573.61	20808.12	0
2011-12	26672.42	14472.19	0
2012-13	21607.12	5559.49	0
2013-14	24498.49	6540.78	0
2014-15	23160.17	6640.13	2.50%
2015-16	20667.80	2770.65	2.50%
2016-17	22783.85	2633.65	2.50%
2017-18	23723.15	2234.91	5%
2018-19	23817.49	1327.75	5% & 7.5%
2019-20 (April to October)	12243.17	793.83	7.50%

Source: GJEPC compiled by Customs data

Note: March 2018 to September 2018 import duty 5%
October 2018 to till today import duty 7.5%

The correlation results below show that the pairwise correlation between tariff rates and imports of cut and polished diamonds is negative, i.e. with the rise in tariff rates, imports reduce. The hike in import duty on cut and polished diamonds to 7.5% from 5% in the budget to curb round-tripping has impacted exports. The industry must pay high duty to bring back the consignments that have been rejected.[131] Cut and polished diamonds were down 19% to USD 8.34 billion (USD 10.30 billion

[131] https://www.thehindubusinessline.com/economy/high-import-duty-impacts-gems-Jewellery-exports-in-august/article29406570.ece

in the same period in 2018-2019) between April and August 2019. In rupee terms, cut and polished diamond exports were down 17% in the last five months to 58,178 crore (69,907 crore in 2018-2019 financial year in the same period).[132] It will be difficult for India to be competitive and become a world leader with such a high import duty structure.

Table 3.4: Pairwise correlation table between Tariffs and Exports and Imports of cut and polished diamonds [133]

. pwcorr	exports	imports	tariff
exports	1.0000		
imports	0.4380	1.0000	
tariff	0.0497	-0.6846	1.0000

Pairwise correlation between tariffs and exports and imports are significant (See FN 133).To facilitate exports, the Government of India introduced the Duty Drawback Scheme (DDS) which seeks to rebate duty or tax chargeable on any imported material and input services used in the manufacture of export goods. However, there is a vast gap between the duty paid and the duty refunded under the scheme. This limits the success of the drawback scheme for jewellery exports. The design of this scheme needs to be reviewed and changed to ensure full duty drawback on jewellery exports. Import duty must be reviewed and fixed at proportional levels to ensure the feasibility of exports.

3.4.2 Goods and Services Tax

With the implementation of GST in India, the excise and the VAT on GJ have been subsumed into GST with the tax rate in the new regime fixed at 3%. Under the GST system, whenever any transaction requires a movement of goods from one state to another, the tax needs to be paid up front. In order to remove the price differential between Indian exports and the international price of jewellery, and to the encourage creation of a strong brand, taxes on the GJ industry need to be reduced. This may be achieved by reducing the rate of GST from 3% to 1%.

Job workers in the GJ industry have historically been kept outside the tax and compliance net under the earlier indirect tax regime. The job work service has been treated as manufacturing hence excluded from service tax eligibility. Further, under the Excise Notification, it was the principal manufacturer and not the job worker who was entrusted with the burden of registering, maintaining accounts, paying duty and complying with other provisions under central excise. The job worker or the karigar should therefore be exempted from GST and the compliance burden. Alternatively, if for reasons of expanding the taxpayer base the job work is not exempted, (1) the threshold limit for registration of a job worker should be increased in order to relieve the latter from stringent tax compliance, and (2) the GST rate on job work charges should be reduced from 5% to 3%, at par with the supply of gold jewellery.

[132] https://www.thehindubusinessline.com/economy/high-import-duty-impacts-gems-Jewellery-exports-in-august/article29406570.ece

[133] Pairwise correlation provides insights into the relationships between characteristics that can be explored further. Correlation coefficients greater than or equal to 0.3 are nontrivial. Pairwise correlations uncover these potential relations of interest. Where associations are detected that, based upon prior knowledge, are judged indicative of relationships worth further study, adjustments for potential confounding variables must be made. Such adjustments are beyond the scope of this brief report. https://www.ncbi.nlm.nih.gov/books/NBK82474/

Another problem is the delay in GST refund, which not only blocks working capital but also requires repeated efforts for claiming them. Gold jewellery exporters reported that the whole process of GST refund is very person-specific; efforts should be made by the Government to make it more transparent.

For silver jewellery, synthetic gemstones and cut stones, there is an extra payment of 16% in the form of GST for domestic sales. This is also charged on e-commerce and on sales to foreign tourists. This is reducing India's competitiveness in comparison to other countries which provide a GST refund. GST should either be refunded or reduced to 3% so that e-commerce trade can grow.

3.5 Special Notified Zone/ Special Economic Zones

The special notified zone (SNZ) is a trading centre where global miners can import and trade in rough diamonds without inviting income tax assessments. Current exit policies from special economic zones (SEZs) are problematic. An exporter has only two options: surrender the property to the builder or ask the Government to purchase it. But the Government insists on purchasing this property at its initial price, whereas builders insist that the Government pay them current price. In both cases, it is not beneficial for the exporter to sell out the SEZ units. The Government should either index the pricing policy of SEZs or allow the renting of the units so that it is easier for the players to exit. In return, the Government can charge the transfer charges of the units.

Further, GJEPC urged the Government to have a Special Notified Zone in Surat as it is the hub for the diamond cutting and polishing industry dealing mostly in small gemstones. These SNZs will provide direct access to SMEs of the sector based in Gujarat to global mining companies. Buyers should be allowed to go to these SNZs and buy without paying any duties. Although the Government has created such SNZs in Surat and Mumbai, it allows only the viewing of diamonds and not their purchase. As a result, the purpose of building SNZs is not fulfilled.

The Government needs to implement the Baba Kalyani report on duty-free sales of jewellery from SEZs/EOUs to domestic tariff areas (DTAs). A committee headed by Baba Kalyani, chairman of Bharat Forge, recommended to the ministry of commerce and industry the allowance of duty-free sales of GJ from SEZs/EOUs to DTAs. Currently, such sales attract a duty of 15%, equivalent to the duty levied on imports of GJ from overseas.[134]

The exporter's body wanted the Government to introduce a realistic turnover taxation regime like Belgium for Special Notified Zones (SNZ) for diamonds. This would facilitate Foreign Mining Companies (FMCs) or their trading arms (not having sales offices in India) to trade their rough diamonds in India.[135] Exporters want a presumptive tax rebate of 6%, however, given the current fiscal position; the Government is ready to negotiate it to around 2%. This facility would also help make India a global hub for exports of cut and polished diamonds.

[134] https://www.business-standard.com/article/economy-policy/credit-squeeze-gst-hiccups-dent-india-s-gems-and-Jewelery-exports-in-fy19-119041900635_1.html
[135] https://economictimes.indiatimes.com/industry/cons-products/fashion-/-cosmetics-/-Jewelery/budget-2019-gems-Jewelery-sector-seeks-cut-in-gold-import-duty-to-4/articleshow/69958655.cms?from=mdr

3.6 Special problems with gold exporters

3.6.1 Hawala in Gold Exports

In India, gold jewellery exports are used as an instrument of interest arbitrage, which is responsible for India's high import of gold vis-a-vis its exports. The exporters import gold into India, convert it into money and lend it out in the domestic market to benefit from relatively higher interest rates. According to the norms set by the Government of India, exports and imports of gold need to be balanced. For this, the RBI gives authorisation to banks to ensure that the exporter provides a certificate which guarantees that the amounts of gold traded (i.e. import and export) are equal. Given this condition, exporters are allowed duty free imports of gold. But, instead of exporting good quality exports, they export goods of inferior quality. This is impacting India's image in the international market. Consequently, the incentives for the import of gold act against the exports of gold jewellery.

As a policy measure the, Government can improve the duty drawback scheme (DDS) instead of allowing duty free imports of gold. In this way, there will not be any leakages through hawala gold, and this will also help with the ease of doing business. Additionally, exporters could get a bank guarantee after showing their turnover to banks instead of showing the certificate verifying that imports of gold are exactly equal to its exports. In India, there are very few genuine gold jewellery exporters. Even if banks do not provide loans and advances to the exporters, there will be no impact on jewellery exports, because these advances are not used by most gold jewellery producers. If the Government provides duty drawback on imports, it will prove sufficient for the exporters to raise the working capital and there will be no need to take advances from the banks. Internationally, there is no country which provides incentives to exporters of gold jewellery. Instead of incentives to jewellery exporters, these schemes end up benefiting those involved in unethical activities in the banking system.

3.6.2 Gold Monetisation Scheme

A majority of gold demand is met through gold imports, which is one of the prominent drivers of India's current account deficit. In order to solve this problem, the Government of India has introduced the gold monetisation scheme (GMS) in the Union Budget, 2015. The GMS is intended to mobilize gold held by households & institutions of the country and to facilitate its use for productive purposes. In in the long run, it aims to reduce the country's reliance on the import of gold. Customers can deposit their idle gold with banks under the GMS, which will provide them safety, interest earnings and much more.[136]

However, banks have not been able to use the gold deposits accumulated under the GMS profitably as they have not been able to obtain enough borrowers who are willing to use the gold metal loan to meet their inventory or other financial needs. Thus, the GMS has been a loss-making venture from the bank's perspective.

While there are many reasons for this, the major issues hindering the success of GMS are:

- All banks are not participating;

[136] https://www.pnbindia.in/gold-monetization-scheme.html

- Very few bank branches are enabled to accept gold deposits under GMS;
- Rejection of the GMS by the borrower as it is not an acceptable financial product in its current format; inter-bank gold borrowing to meet the demand/ supply of gold for the GMS is not permitted.

In order to make the GMS a success, the Government of India should make it mandatory for all the banks to participate in it and ensure that all bank branches accept gold deposits under the scheme. It must also extend the GMS. It should set a target of 100 tonnes of gold to be accumulated under the GMS and have this monitored by the Department of Financial Services, Ministry of Finance. The Government should spread awareness by disseminating information regarding the GMS to all bank officials to better understand the gold jewellery industry and to maximise the benefits of the low rate of offering of the GMS. It should make provisions for inter-bank lending of the gold deposits received, in order to optimally utilise the gold deposits.

A large chunk of gold in India is lying idle in religious institutions. The Government should examine why private banks are not receiving any deposits under the GMS from temples and ensure that the necessary state/central ordinances are provided, if required, to enable them to do so. The Government should encourage religious institutions to not hold physical gold beyond a pre-fixed quantity, and to deposit all gold donations, thereby disabling theft and ensuring transparency for gold donations received. Currently, the minimum limit of a gold deposit is 30 grams under the GMS. It should be as low as 1 gram, and multiples thereof. This would enable the masses to come forward to deposit their un-utlised gold.

3.6.3 Hallmarking

Hallmarking was a voluntary scheme introduced in India under the Bureau of Indian Standards (BIS) Act, 1986 with the objective to protect consumers against irregular gold quality, to develop export competitiveness and to make India a leading gold market in the world. It would help India become a member of the Vienna Convention, allowing the articles hallmarked in India to be imported into the member countries without further testing or marketing. The BIS Hallmarking act, 2016 and the Draft BIS Regulations, 2017 were announced with an intention to implement hallmarking in the country. Hallmarking of gold jewellery and artifacts will be made mandatory across the country from January 15, 2021 to ensure the purity of the precious metal. However, some of the provisions therein are seen as a hindrance to the free flow of trade, and would take the business back to the times of the License Raj.

The provisions in the Act and the Regulations mandate a jeweller Certificate (License) for the manufacture and sale of jewellery. These requirements and provisions pose a hindrance to the free flow of trade and take us back the era of requiring permission to conduct trade. There is a duplication of effort for the jeweller due to the twin requirements of maintaining the records of the hallmarking of jewellery and the purchase of hallmarked jewellery which carries the stamp of different certified jewelers. In addition, the numbers of stamps are excessive and compromise the design of the ornament.

A deeper understanding of the market is required to design the rules to facilitate the ease of

doing business (which should be the purpose of hallmarking). The numbers of AHSs (Assaying and Hallmarking Centers) in India today are grossly insufficient to provide for the immediate hallmarking of all the jewellery present in the country. Hence, the introduction of mandatory hallmarking should be a well thought-out process. The BIS should formulate a plan with milestones for infrastructure development before recommending that hallmarking be mandatory in India.

The jewellery certificate should not be required each time to manufacture and sell hallmarked jewellery. All purities of gold jewellery should be permitted to be sold in the nation, as the certificate restricts rather than enables trade. Hallmarking records should be maintained by the Hallmarking Centre only, with no requirement for the jeweler to do so. It should be held solely responsible for the purity of item once it is hallmarked. In the event of low caratage, the retailer should compensate the consumer and be re-compensated by the Hallmarking Centre accordingly.

3.6.4 E-Way Bill

Currently, the transfer of gold jewellery has been kept outside the mandate of the E-Way Bill under the GST act. While this applies to the transport of goods in excess of Rs 50,000 within or outside a state, it must be recognised that disclosing transport information beforehand compromises the security of a carrier. For the safety of the carrier, this information should not have to be disclosed in an E-way Bill.

3.6.5 B2B and B2C Exports

The current Indian export policy is oriented towards exports that cater to the B2B exports for Indian handmade jewellery. This is a high sale but low profit business with low value addition. The scale of manufacture of machine-made gold jewellery in India is low. Hence the B2B exports for the same are extremely low.

The other approach to boost export is B2C trade, which results in higher value addition but lower sales turnover, as the retailer has the direct interface with the customer. With the exponential rise in technology-enabled trade through e-commerce trade platforms, there is a vast opportunity to promote B2C transactions for exports. This route has not been considered anywhere in the export policy for Indian gold jewellery. The development of a policy aimed at promoting B2C sales allowing benefits from a higher value addition of exports must be emphasised.

To focus on B2C sales, a Standard Operating Procedure (SOP) for e-commerce of GJ items needs to be developed so that the interests of the consumers as well as sellers can be protected. As such, the United States does not have any sales tax for internet sales, and this provides a huge opportunity that should be explored.

3.6.6 Sovereign Gold Bond Scheme

In the annual Union Budget of 2015, the Honorable Finance Minister announced the Sovereign Gold Bond Scheme (SGBS) to enable the purchase of gold in electronic form. The price of the SGBS is linked to the price of gold, supplemented with an interest of 2.5% per annum. The SGBS is not

available at all times, and its subscription is limited to the launch of the next tranche. However, it is imperative to point out that these bonds are not backed by physical gold, and this exposes the Government of India to any change in the price of gold which may, therefore, lead to a gain or loss due to speculation.

After evaluating the SGBS in depth, the objective of the Government of India can be better served through the launch of a Gold Saving Account (GSA) in place of the SGBS. The GSA will provide all the existing benefits of the SGBS. In addition, it would also allow the issuer, the Government of India, a mechanism through which it could "back" the SGBS with physical gold without requiring the import of physical gold into the country.

3.7 Customs Related issues

Customs related issues differ between the diamond industry, gold, silver and semi-precious stones. However, there are some common problems. While the diamond industry has problems of valuation, size, and duty rates, gold exports mostly face administrative issues which delay the release of their consignment at the port. Others face problems related to administrative issues related to the value of their consignment.

3.7.1 Horizontal Problems of all GJ exporters

Exports are not convenient even for people who have been trading in the market for several decades, of which a portion are "Status Holders". Status Holders are business leaders who have excelled in international trade and have successfully contributed to the country's foreign trade. They are expected to not only contribute towards India's exports but also provide guidance and handholding to new entrepreneurs. A three-star status allows the exporter to send his/her consignments without any examination. Additionally, they do not need to show any increase in value addition. These advantages were conferred with the objective of boosting export production as well enhancing the exports performance of the country. However, customs officials insist on examining every consignment; they want the exporters in question to show the increase in value addition, which creates a significant delay in export consignments.

The Government, however, having detected a transformer in a small diamond consignment, prefers to err on the side of caution. To ease exports, customs officials can use a random sampling or systematic random sampling method and check a small sample out of all the consignments instead of checking all consignments.

Under the e-commerce policy, consignments of less than USD 800 are not checked by customs officials. The Government can also extend this to normal exports by issuing an ordinary license for consignments of less than USD 800, for the low value GJ segment as long as they are exported through nominated agencies. The Government can have an agency list which lists agencies where due diligence has been followed.

In 2019, the Customs department launched a scheme of "Authorized Export Operators". An AEO is a party involved in the international movement of goods in whatever function has been approved by

or on behalf of a national customs administration which complies with World Customs Organization or equivalent supply chain security standards. Exporters were asked to register with the scheme but this required a lot of work and detailed information, which needs to be simplified.

The Customs department is beset by red-tape. There is no consistency in the documentation process for MoC and MoF, which delays the whole process. Exporters are bound to provide speed money to expedite the entire process, which unnecessarily increases the cost. The changes in policy should be immediately modified and adopted by all concerned Government departments and, in case of system failure, Customs officials should address the problems manually instead of delaying export procedures.

Often, importers do not keep all the consignments which have been exported from India. They return some of them to the exporter. However, Customs imposes an import tax on these return consignments, which creates unnecessary costs for the exporters. A normal international business practice is that the Government does not impose any taxes on what is returned. The Government of India should also follow such practices.

Many customers wanted to send their jewellery for repair but the process and duties charged in such transactions are not clearly defined by the Customs department. The latter must define this process and create a duty-free bonded area for the repair of jewellery.

An exporter must have certification from the Customs clearing house, the bills of shipment clearing house and then from logistics companies before sending it to the airport. Exporters desire a special customs area (dry ports) so that customs clearance becomes convenient and they are able to shift their consignments easily.

3.7.2 Diamond Industry

Rough and industrial diamonds attract different duty rates. It is difficult to differentiate between rough diamonds and industrial diamonds. Therefore, the classification should be made on the basis of each importer's type. Jewellers mostly import rough diamonds and not industrial diamonds. If the GJEPC provides a certificate stating that the Jewellers are importing it, the Customs should not charge the rate for industrial diamonds, which is higher than that of rough diamonds. They should rather charge the rough diamond rate.

The export consignments contain mixed diamonds of every size. Customs officials use a sieve to determine whether the consignment contains diamonds of the specified size. Generally, a small margin of error is acceptable. If the Customs officials find an infraction, they seize the entire consignment. It is then not released for six months. This blocks the working capital and interest costs for exporters. Customs also keeps shifting the goal post of acceptable error between a wide range of 5%-15% so that officials can get more money as a bribe. The laws should be designed such that the seized products can be quickly released.

Diamond exporters face several difficulties on account of an Office Note issued on 4 May 2019 by Mumbai Customs regarding variation in the dimensions of cut and polished diamonds and variation

in the valuation of rough diamonds. As there are no standard global norms for the valuation of rough diamonds or examination of the dimension of polished diamonds, exporters face several difficulties.

In May 2019, the Customs Department sent an Office Note to all custom assessors for clearing rough-cut diamond (also called 'roughs') packets into the country. The note listed out a set of 'declaration/ disclosure rules' that importers have to obey while importing rough diamonds. It required importers to specify the origin (country/mine), size, shape, type, colour and other relevant details of the roughs which would allow the Customs Department to assess the value of incoming packets.

According to sources at Bharat Diamond Bourse, the new set of declarations has only helped corrupt Customs officials demand more bribe. A few diamond importers say they are forced to pay money to get their parcels released. "If we don't pay, they hold back parcels citing 'spelling mistakes' or minor errors in declaration," said an importer. The industry is already going through a phase of tepid demand and liquidity stress. This additional declaration only increases the burden on exporters. At this rate, with survival becoming difficult in the diamond polishing industry here, many manufacturers may shift to Africa or Russia.

3.7.3 Gold exporters

Import of gold for jewellery exports is allowed under Government of India rules. A gold bond is issued by the RBI for such a purpose.[137] Against the gold bond, exporters can raise working capital. However, the Customs officials do not allow the import of gold without speed money. There are very few jewellery exporters who get the advance that they are entitled to in terms of gold.

The RBI circular No. 23/2018 states that the same gold that is imported should be used to make jewellery for export. Therefore, a CA's certificate is required to prove that the same gold is exported. The RBI is going to withdraw this requirement, but it has not still been done. The Customs officer is unwilling to accept that the RBI circular does not require this CA certificate, which results in an unnecessary delay in delivery of consignments.

Under current customs rules duty-free goods up to Rs 50,000 are permitted as 'gifts' via courier for personal use, but to complete the process, stringent know your customer (KYC) norms must be followed. Each time, exporters are required to fill a KYC form with a lot of agencies. If any discrepancy is found while filing KYC, Custom officials do not allow exports, which leads to the blockage of working capital. However, the Government is planning to ban this requirement at airports.

During identification, documentation is not a major issue. It is the duplication of documents which creates a problem. Currently, there are five regulatory bodies for exports of gold jewellery. The Government could boost convenience by merging them into one body. This will ease the documentation process and reduce unnecessary burden on exporters. To counter this problem, the Government is planning to merge all these regulatory bodies into a single statutory body, the "Gold

[137] Sovereign Gold Bond (SGB)s are Government securities denominated in grams of gold. They are substitutes for holding physical gold. Investors have to pay the issue price in cash and the bonds will be redeemed in cash on maturity. The Bond is issued by Reserve Bank on behalf of Government of India.

Board of India", under the Ministry of Finance. The members of the GBI will include representation from all concerned ministries, regulators, warehousing authorities, etc. associated with the gold and gold industry in any form. In order to boost exports and value addition of gold jewellery, the GBI should closely work with the ministry of commerce to develop FTAs and work on the details of their feasibility.

3.7.4 Silver and semi-precious stones

For silver jewellery, synthetic gemstones and cut stones there are 4-5 documents demanded by customs and double invoicing is applied. Exporters need an export declaration form as well as a commercial invoice. In order to simplify procedures, only commercial invoices should be demanded, and a dedicated counter should be set up for small value shipments. Exporters want self-certification to be customs free, i.e. the commercial invoice should suffice and there should not be any requirement for an export declaration form, which contains the same information.

There should be a single document for Rs 500,000 shipping bill, no matter how many shipments there are. Banks should generate foreign inward remittance certificate (FIRC) for this amount, which should be matched with the shipping bill. There should be no further clarification of documents after this. When a business entity purchases from India, it makes purchases from several retailers and receives invoices from every retailer. In this case, the Customs Department should club invoices from all retailers instead of checking every invoice.

The Government of India regulates, assesses and clears goods imported by courier under the Courier Imports and Exports (Clearance) Regulations, 1998. The duty, where applicable, is paid by the courier company on behalf of importers/ exporters prior to delivery.[138] Courier companies must give a shipping bill each time to obtain fast track clearance, which currently they cannot. In India, courier and transportation services are very expensive; they should be made cheaper.

3.8 Digital Payments

While the use of credit and debit cards have increased over the last two years, the jewellery industry faces issues which virtually prohibit the widespread use of credit and debit cards for the purchase of GJ. There is a need to address these issues so that the GJ industry can go digital. The issues are as follows:

1. Absence of Standard Operating Procedure (SOP), through which payment is guaranteed to the merchant;
2. Absence of a proper dispute resolution mechanism;
3. High transaction cost such as, taxes, miscellaneous charges, etc;
4. Non-availability of the acceptance infrastructure for credit and debit cards;
5. Regulatory restrictions on EMI-based sale.

The Government should create an SOP through which credit card payments are guaranteed to the merchant establishment and set up a dispute resolution mechanism and, consequently an Ombudsman to resolve disputes raised with regard to such payments. The Ombudsman must deliver judgments within a time bound period of fourteen days on any disputes that are raised.

To promote credit and debit card usage, the Government should lower the credit card acceptance charges charged by jewellery retailers, as it is a transparent pricing method. Banks also need to initiate a drive to install the machines throughout all markets, which will enable the acceptance of credit/ debit cards as a payment option for customers. To boost the use of digital payments, the Government should offer a rebate of 50% on the GST payable in an effort to incentivise investors to make digital payments.

3.9 Conclusions

The GJ sector in India plays a significant role in the Indian economy, contributing around 6-7% of the country's GDP and 15% of India's total merchandise exports. It is a labour intensive sector employing over 4.64 million workers and is expected to employ 8.23 million by 2022.[139] The Government of India has declared the sector as a focus area for export promotion based on its potential for growth and value addition. It has recently undertaken various policy measures to promote investments and upgrade technology and skills to promote brand India in the international market. Despite these efforts, the growth of the GJ sector was not impressive in the last fiscal year. The data collected by GJEPC showed that India's exports in the GJ sector declined by 5.32% during the fiscal year 2018-19 on account of a slowdown in major developed markets and domestic problems. It is expected to decline by a similar percentage in 2019-2020.

Major hurdles to conducting gems & jewellery trade in India are the difficulty in ease of doing business (owing to the regulatory system present in India), high import duties, a credit crunch, and customs related issues. Unfavorable policies of SEZs and infrastructural bottlenecks also act as roadblocks to trade. This financial year has seen an estimated 15-20% jobs loss in the diamond cutting and polishing centres of Surat and other smaller centres amid a demand slowdown.[140] Given the current scenario, it will be difficult for India to achieve its target of USD 60 billion exports by the year 2022 and India will not be able to attain a global leadership position in gems and jewellery. Looking at the significance of the sector to the GDP and the employment opportunities for both skilled and unskilled workers, it is very important for India to formulate policies to revive the growth of GJ sector so that the Industry's vision 2022 is achieved and India emerges as a global leader in GJ exports.

During the authors' interaction with major industry players, some low hanging fruits were identified, which Governments can use as a short-term package of policy measures to increase exports:

1. Customs officials should use the random sampling method instead of checking each and every consignment;
2. There should be consistency in the documentation of different export related agencies and ministries;
3. There shouldn't be any import taxes on returned consignments;
4. The certification requirement that the "same gold that has been imported should be used for making the jewellery and exporting it" should be removed;
5. The limit on buying gold jewellery without a PAN card should be extended to INR 5 Lakhs from INR 2 Lakhs.

[139] https://www.ibef.org/industry/gems-Jewellery-india.aspx
[140] https://economictimes.indiatimes.com/markets/commodities/news/gems-Jewellery-eyes-new-markets/articleshow/73065388.cms?-from=mdr

6. Self-certification should be customs free;
7. Incentives provided to the gold jewellery exporters should be stopped;
8. The Government should provide the bank guarantee after looking at the export value of an exporter instead of looking at the certificate of trade balance;
9. SNZ must work so that all the producers of diamonds, miners, etc. arrive there and sell their diamonds instead of going to Dubai and Antwerp, which costs an additional 2%;
10. Import duty is around 7.5-8% here, it should be reduced to 2.5-4%. The opportunity cost of the high import duty is that India is not becoming a diamond hub;
11. Customs duty should be reduced to the previous level, i.e. 10% on gold imports from 12.5%;
12. The process of GST refund should be eased and the Government should make it more transparent (it is presently very person specific);
13. Commission on credit cards should be reduced to less than 1% so that the digitalisation can be improved in this sector in particular;
14. The Government should participate in the generic promotion of exports of diamonds by contributing to make up the shortfall in the planned GJEPC fund of USD 2.3 billion for the purchase of rough diamonds;
15. The Government should charge Libor+300 points for working capital and rupee equivalent of dollars should set the limit of borrowing.

CHAPTER

Auto and Auto Component Sector

The Automotive Mission Plan 2016-2026, a vision document prepared jointly by the Government of India and the automobile industry in the country, aims to make the sector the engine of the "Make in India" initiative as it is expected to contribute to 40% of the manufacturing sector and 12% of the GDP by 2026. The vision document recognizes that the automobile and the components sector has the ability to scale up exports to 35-40% of its overall output by 2026, helping India become one of the largest exporters in this sector globally.

The Mission Plan states that "By 2026, the Indian automotive industry will be among the top three in the world in engineering, manufacture and export of vehicles and auto components and will encompass safe, efficient and environment friendly conditions for efficient mobility of people and transportation of goods in India, comparable with global standards…" However, discussions with the industry show that while exports have remained an important part of the growth strategy drawn up by auto companies, the growth in the domestic market has been the area of main focus for the companies. The export strategy has always remained tied to growth in the domestic market.

The vehicle and component industry in the country has over the years helped establish India as a leading global manufacturing hub for automobiles -cars, two-wheelers, buses and commercial vehicles. India is a major hub that meets the needs of the growing domestic and export market largely because the Government and the industry have worked hand-in-hand to develop policies that benefitted the sector. However, the industry is of the view that some changes to the existing policies could turn India into an export hub for small cars.

Introduction

The Indian automotive industry is the fourth largest globally, with an annual turnover of around USD 120 billion. It contributes to 8% of India's total exports and 27% to industrial GDP.[141] The auto component industry registered a turnover of USD 57 billion in 2018-19 and exports were at USD 15.16 billion with an over 17% growth compared to the previous year. Europe with 33% and US with 29% share of India's component exports continued to be the predominant overseas markets.

Europe is the largest market for Indian auto-component exports with a share of 33%, followed by North America at 29%; Asia 26%, Latin America 6%; Africa 6% and CIS 2%. In terms of countries as export destinations-USA with 25% share remains the largest partner, followed by Germany at 7% and UK at 5%.[142]

[141] Source: Society of Indian Automobile Manufacturers (SIAM)

Indian automobiles have a large global market: Two-wheelers are exported to over 120 countries with Bangladesh, Nigeria, Colombia, Sri Lanka and Nepal being the top five markets. Cars are exported to over 175 countries with Mexico, USA, South Africa, Saudi Arabia and Algeria being the top five markets. Buses are exported to over 50 countries and Nepal, Sri Lanka, Senegal, Tanzania and Kuwait are the top five destinations. Commercial vehicles are exported to over 110 countries and Bangladesh, Indonesia, Nepal, South Africa and Sri Lanka are the top five buyers.

Table 4.1 shows that the position of India in the export of auto and auto components since 2015 has been more or less static, while there has been a small increase in its share from 1% to 1.2%.

Table 4.1: Changing Share of Indian Exports in Auto and Auto Components

Ranking (2018)	Value of Exports (2014) (in USD billion)	% share in world Exports (2014)	Value of Exports (2018) (in USD billion)	% share in world Exports (2018)	Change in Absolute export share
Germany	259.4	18.6%	264.0	17.2%	-1.4%
Japan	142.5	10.2%	154.0	10.0%	-0.2%
USA	135.9	9.8%	130.7	8.5%	-1.3%
Mexico	85.9	6.2%	115.5	7.5%	1.3%
China	64.1	4.6%	75.0	4.9%	0.3%
Rep. of Korea	73.3	5.3%	61.1	4.0%	-1.3%
Canada	60.0	4.3%	60.4	3.9%	-0.4%
Spain	51.6	3.7%	57.3	3.7%	0.0%
France	47.6	3.4%	56.4	3.7%	0.3%
U.K.	54.4	3.9%	54.7	3.6%	-0.3%
Belgium	45.9	3.3%	51.6	3.4%	0.1%
Italy	38.5	2.8%	45.2	3.0%	0.2%
Czech Republic	33.2	2.4%	40.9	2.7%	0.3%
Thailand	26.0	1.9%	30.8	2.0%	0.1%
Poland	22.5	1.6%	30.0	2.0%	0.4%
Slovakia	21.4	1.5%	28.1	1.8%	0.3%
Turkey	18.1	1.3%	26.8	1.7%	0.4%
Netherlands	20.2	1.5%	26.3	1.7%	0.2%
Sweden	16.1	1.2%	23.6	1.5%	0.3%
Hungary	17.8	1.3%	20.5	1.3%	0.0%
Austria	15.8	1.1%	19.8	1.3%	0.2%
India	14.5	1.0%	15.3	1.2%	0.2%
World	**1393.1**	**100%**	**1533.9**	**100%**	

Source: COMTRADE

[142] Source: Automotive Component Manufacturers Association (ACMA)

4.1 Making India a hub for small cars

Making India a hub for small cars was first envisioned in the Automotive Policy of 2006-2016. The vision and the subsequent push by the industry helped the automotive industry in India capture over 30% of the global market for small cars. Beyond small cars, India has also emerged as a leading global supplier of diesel and petrol engines of small capacity, commuter two and three-wheelers, low-powered tractors, engine and transmission-related auto components and many other lower-end auto components. Importantly, the whole value chain across the auto sector has helped India become a significant player in the small car market.

The main reason for India becoming a hub for small cars has been the demand in the domestic market for small cars due to the growing middle-class segment in the country. A report by the India Brand Equity Foundation (IBEF)[143], "India: Mecca of Small Car" quotes a McKinsey Study that provides seven advantages for the growth of the small car segment in India. These include the huge domestic demand for small cars that are fuel efficient, the low cost of production in India, and the availability of a large engineering services background. Other factors such as a strong intellectual property (IP) regime for car production in India and the country's location advantage exporting to different markets also benefit the sector, according to the report.

The presence of large automobile manufacturers in India and the healthy growth of the component industry has also led to the growth of the small car segment in India. The drive towards making India a small car hub has, in the recent past, been primarily led by the manufacturers who have managed to build a market for cars in the lower cost segment to replace the large two-wheeler market in India. Government policies, since the 1990s, have mainly been to ensure that India remains at the higher end of emission norms so that lower technology products from China or other countries do not flood the market. However, one major support for the growth of the small car industry in India by the Government, in the recent years, has been to keep the taxes on large vehicles and SUVs at higher levels than on smaller cars. However, in the early 1980s, the Government was the main driver towards bringing the small car segment into India. The Maruti venture was primarily a Government driven initiative that helped develop a strong base for small cars in India that the growing middle class could afford.

Industry officials who were interviewed for this report observed that the auto and auto component industry in India has been built over the years to tap the large domestic market. However, given the significant strides made by the industry in developing the strong small car segment in India, and due to the presence of large Indian conglomerates and all large global players in the market, the sector has managed to make India a significant export hub for small cars.

4.2 Industry-Government strategy to safeguard investments

The auto industry has managed to make great strides towards becoming a globally competitive sector due to the presence of a strong industry -Government partnership, as we mentioned earlier. The two sector-specific associations -Society of Indian Automobile Manufacturers (SIAM) and the

[143] https://www.ibef.org/download/India-Mecca-of-Small-Car.pdf

Auto Component Manufacturers Association (ACMA) -have built a strong partnership with relevant stakeholders in the Government to build a robust platform to boost the country's export performance. It has also helped India build a very strong quality and standard ecosystem in line with the best in the world.

India understood the need to build local content requirements for cars in the country along with ensuring high emission norms that are at par with the best in the world. As mentioned earlier, this has ensured that the levels of technology for engines and other critical components has remained high. To maintain the levels of emission standards, the Government has also made sure that the fuel quality matches the needs of higher technology engines, industry insiders said. While weak infrastructure like bad roads and congestion have been challenges, the industry has managed to keep its standards at very high levels.

Historically the first small car in India was the Maruti 800 that was launched in 1984 where the Government was a joint venture partner along with the Japanese car manufacturer Suzuki. When the car was first produced only about 3% of the components was produced in India with the rest imported from Japan. However, the Government set a target of achieving 93% indigenisation by 1993.[144] This led to the company developing local vendors from scratch. The company attracted entrepreneurs by offering them land at its complexes and supplied electricity from its own power station. In addition, Suzuki engineers helped the new manufacturers with automation and management practices such as just-in-time manufacturing.[145]

Further, in 2018 when the Make in India initiative was launched, the Department of Heavy industry, Government of India in its new norms notified that with an aim to "encourage Make in India" and to promote manufacturing and production of goods and services locally, "preference shall be provided by all Government procuring entities to domestically manufactured automobile and automotive components."

Besides the Government push, an important reason, in the recent past, behind India becoming a big exporter of automobile and auto parts to countries across the globe has been primarily because of high levels of standards that exist in India that are harmonized with the best in the world. Indian products do not face any barriers due to lack of emission norms. However, other non-tariff barriers exist in some important markets of interest to the industry in India that need to be tackled on a bilateral basis for boosting exports.

The significant FDI in the sector, industry insiders feel, may have been possible primarily due to the fact that India kept the tariffs unbound at the WTO for passenger cars and two-wheelers. However, for commercial vehicles the duties were bound at 25%. For auto components, too, the customs duty at the WTO was bound at 25%. In the NTM arena, India has very high emission standards that managed to keep cheaper vehicles from flooding the market.

The auto industry is safeguarded across the globe primarily because it has been recognized as the mother of the manufacturing sector. Several sectors -steel, aluminium, plastics, rubber, glass, machine

[144] Amann, Edmund and John Cantwell. (eds.) (2012), "Innovative firms in emerging market countries." Oxford University Press; and Kale, Dinar (2017), "Sources of innovation and technology capability development in the Indian automobile industry." Institutions and Economies, 121–150.

[145] The Growth of the Indian Automobile Industry: Analysis of the Roles of Government Policy and Other Enabling Factors-Smita Miglani

tools, etc. – are major suppliers to the sector and fluctuations in the auto industry have repercussions for these sectors as well.

The automobile sector also supports a large range of services including logistics, banking and insurance, research and development and service and repair among others. The auto component sector also supports a large number of small and medium-sized firms.

The last two decades has been a period of focused growth for the sector. The auto industry has ensured a domestic industry that meets high emission norms at par with the best in the world. The sector has also witnessed a large investment inflow primarily focused on the domestic market.

Importantly, the auto and auto component sector in India have grown in tandem due to investments across the value chain. This has made it easy for the sector as a whole to tap the export market as the manufactured product meets global standards. While the auto and auto component sectors have followed different strategies for export, they also had a joint strategy to seek policy changes that impact the whole value chain.

The Automotive Mission Plan that was first launched in 2006 and again in 2016 is a joint effort of the Government and the industry and it has helped the sector focus on growth and build significant capacity. Importantly, the Government and industry have invested in ensuring that the eco system towards building a strong auto market has been achieved. For instance, the standard setting bodies and testing agencies in India have remained very strong.

Secondly, Indian auto sector has been a very strong participant in all global dialogues on auto industry. The discussions under the United Nations Economic Commission for Europe at Geneva, Switzerland, have seen Indian participation over several years, ensuring that the Indian voice on global auto standards remained robust. This is also a major contributor to India's export success in this sector. The World Forum for Harmonization of Vehicle Regulations is a working part of the Sustainable Transport Division of the UNECE.

4.2 Industry: policy focus for growth

The auto industry in India has been facing some very strong head winds over the last year as demand slumped in the domestic and global markets. Therefore, there has been an attempt to engage with the Government to take some significant policy decisions to make the industry globally competitive.

4.2.1 Historical perspective

Indian automobile industry has received strong Government support during its inception years. The Government ensured that the industry develops in a right fashion and enough indigenisation is achieved. Till the 1980s, the commercial vehicles were the second largest segment (after two-wheelers) holding around 20% share in production. After the mid-1980s, passenger vehicles emerged as the second dominant segment, increasing its share from 7% in 1985–1986 to around 15% in 2011–2012 and 14% in 2015–2016. Sales of passenger cars touched 1.2 million units in 2006 and 3 million units in 2016–2017 to maintain the second largest market share in the industry.

In the 1980s, after the Japanese automobile companies started investing in India due to the Government push to take stake in this sector. The Government put in place a Phased Manufacturing Programme (PMP) for localization of components, under which domestic original equipment manufacturers (OEMs) had to increase the proportion of domestic inputs used in their output over a specific period. The Indian companies went ahead to have JV collaboration with several Japanese and foreign OEMs. This enabled Indian companies to benefit from equity inflows and technology transfers. This phase is widely regarded as the first wave of FDI in the sector.

However, after the mid-1990s, the Government slowly eased the norms for the sector and the companies started developing their markets by competing with each other based on market forces. Therefore, now with the industry facing difficulty in accessing the domestic and foreign markets it is looking for some support from the Government to boost demand domestically that will also help push exports.

The different recommendations by the automobile and component sector include pursuing tax benefits (including reduction in GST rates) and seeking bilateral agreements with markets of interest to promote the use of technology by suggesting a technology upgradation fund.

4.2.2 Tax Rationalisation

1. **GST:** The automotive industry in the country is of the view that India has among the highest taxes on the automobile sector. To correct this anomaly, SIAM has recommended the following:
   - GST rates for Internal Combustion Engines (ICE) based vehicles are at the highest GST rate of 28%, additionally a compensation cess in range of 1% to 22% is levied. This makes vehicles the highest taxed manufactured product in India.
   - GST rates for ICE-based vehicles and its components should be reduced from the current 28% to 18%.
2. SIAM is of the view that these changes will not have a one-to-one impact on Government revenues because price reduction will boost demand, leading to higher revenues. Also, vehicle pricing is expected to rise due to the implementation of BS VI emission norms and various safety features in the vehicles, which will generate higher revenue.
3. The automotive component industry, on the other hand, faces another challenge. While nearly 60% of its products are at 18% GST rate, the remaining are at 28%. Further while electric vehicles have a GST component of 5%, components for EVs are at 18% and 28%. To stem credit outflow and make the industry competitive, ACMA has suggested that components for EV vehicles too should have 5% GST and the remaining 40% components that face the highest level of GST rates should also be brought down to 18%. ACMA is of the view that a 28% GST on components actually leads to the development of a grey market that harms the component industry.
4. In the short term, both the SIAM and ACMA would want the Government to hold consultations with them to bring the GST rates to levels that will spur the industry forward.

4.2.3 Push for R&D

1. ACMA and auto component players are of the view that frequent regulatory and technological

changes require enhanced spend on R&D in the following key areas: a) Emission; b) Safety; c) Industry 4.0; d) Electric Mobility e) Increasing electronics in vehicles. Therefore, the auto component industry is of the view that there is a need for incentives to upgrade technology.

2. As the next step, it may be important for the Government to work closely with the industry to come up with a strong platform that can assist the industry in pushing R&D in the sector. Currently, the Government does not provide enough incentives for R&D in the sector.
3. Weighted deduction under the Income Tax Act available to companies for R&D spend, auto insiders feel, should be extended to a long period of time and should also be available if it is outsourced to third parties. This, industry officials feel, will help in pushing many companies into providing R&D to auto companies.

4.2.4 Technology Upgradation Fund for the auto component industry

1. ACMA is of the view that the following technology intensive disruptions are expected to hit the Indian automotive component industry in the near to medium-term horizon:
   I. **Step-change in emission norms:** The shift from BSIV (Bharat Stage IV) to BSVI (Bharat Stage VI) from 2020 is a probably a greater challenge for Indian manufacturers of components owing to the electronics and technology-intensive nature of latter management modules. Most of the technology used in these aspects is still imported and the Indian eco-system is striving hard to compete at the same level as internationally developed and scaled alternatives.
   II. **Safety:** The industry welcomes Government efforts to make Indian passengers and pedestrians safer. Making ABS and airbag mandatory is a pertinent step in that direction. Owing to the higher percentage of imported component in these safety related devices, it is important for the Indian manufacturers to develop Indian solutions to prevent the trade imbalance from tipping negatively.
   III. **Automotive electronics:** By 2020, around 35 %-40% of the value of a passenger car in India will be contributed by electronics. Hence it is critical for Indian manufactures to find the India-specific, cost-to-performance sweet-spot in these typically expensive components.
   IV. **Electric mobility:** The Government of India's vision for electrification of power train – when matched with an increase in the industry's preparedness – can potentially set an example for all environment-conscious Governments to benchmark against.
   V. **Light weighting:** With a view to optimize dependency on fossil fuels, the industry and the Government see immense potential in light weighting of vehicles in order to drive greater fuel efficiency.

ACMA is of the view that to meet the challenges mentioned above there is a need for the **Government to consider setting up specific technology upgradation fund** targeting upcoming technological changes (like electrification of power trains). These funds can be in the form of soft loans, tax incentives etc. Such incentives are provided in other countries like China, Malaysia, Brazil and Indonesia.

4.3 Intellectual Property protection: patent push

In a highly competitive global market in the auto component sector, one important policy push will be to provide a boost for companies willing to patent their products. ACMA is of the view that the current regime needs some tweaking to help companies and individuals in this sector benefit.

Rationalization of Patent Box Regime under section 115BBF: Finance Act, 2016 introduced a new section, 115 BBF, where qualified taxpayers could claim beneficial tax rate of 10% (on gross income basis) in respect of income from utilization of patents developed in India. The benefit of beneficial rate was restricted to true and first investors only in whose name the patent was registered. The Patent Box Regime law introduced in India, ACMA feels, needs to be rationalized further to truly benefit the industry.

The industry is of the view that it should be clarified that royalty received from overseas for a patent registered in India -as also in a foreign country -also qualifies for concessional rate of tax. The benefit should not be denied on the ground that such royalty is attributable to a foreign patent.

In the case of a business re-organisation in the form of merger, demerger etc., the successor entity and, in the case of death of the patent owner, the legal heir/inheritor of the patent should be considered eligible to claim the benefit provided that such successor/legal heir satisfies the conditions of being a resident of India.

It is recommended that a concessional rate be extended to companies that exploit their own patents in the manufacture and sale of articles, by imputing a 'royalty' income determined on the basis of the arm's-length principle. It is recommended that the concessional regime should also be extended to capital gains arising in the hands of the taxpayer on account of the patent.

4.4 Reducing duties on raw materials and intermediates to meet global price challenges

The automotive component industry is of the view that the cost of raw materials is very high in India. The imposition of high customs duty on Chinese imports of these products increases costs. The industry uses a wide variety of raw materials: this includes HR/CR steel as well as alloy steels. The cost of raw material constitutes approximately 60% of the cost of an auto component. Therefore, any fluctuation in raw material price has a major impact on the component industry.

In a situation, where domestic prices are benchmarked to international prices plus Customs Duty, there is no perceived need for import Duty protection. The import duty only provides steel manufacturers an opportunity to charge higher prices by increasing the benchmark import price with a higher margin of profit, according to the component industry that provided inputs for this report.

The industry was of the view that 60% of the cost of manufacture for the auto component industry can be attributed to the cost of raw material. The rise in global steel prices leads to a cost disadvantage for Indian automobile manufacturers. This is in contrast to automobile manufacturers in China. Since Chinese steel manufacturers offer lower priced steel to the automobile manufacturers, the cost advantage for the Chinese manufacturers is large, industry officials in India state.

The Indian auto-component industry is also burdened with high raw material prices which make value added products uncompetitive vis-à-vis Chinese prices. Under these circumstances, this puts the entire auto industry in the country at great peril while competing in global markets where China has a strong presence.

4.5 Using FTAs & Other Trade Agreements

4.5.1 Automobile industry

The vehicle industry in India is of the view that the free trade agreements that have been negotiated or are being negotiated by India do not reflect the interests of the sector.

Instead, the automobile industry has a set of markets where it is keen for India to build trade agreements where reciprocal tariff reductions and other discussions will help boost the market for Indian automobiles. The following are the focus regions and countries identified by SIAM for trade agreements that can prove to be mutually beneficial.

Table 4.2: Desirable FTA destinations

Sr. No.	Region	Country
1	Africa	Algria
2		Libya
3		Nigeria
4		Kenya
5		South Africa
6		Egypt
7	Latin America	Chile
8		Peru
9		Colombia
10	Middle East	Saudi Arabia
11		United Arab Emirates
12		Israel
13	South East Asia	Indonesia
14		Phillippines
15	South Asia	Bangladesh
16		Srilanka
17		Nepal
18	Mexico	-
19	Australia	-
20	United Kingdom	-

Source : Interviews with stakeholders

India's automobile manufacturers have come up with the following recommendations on which the Government could hold discussions with Bangladesh, Nepal and Sri Lanka and many African countries:

1. The continued dialogue with policymakers in these countries highlighting concerns with using used/refurbished vehicles may help boost exports from India – we have the export base for small cars that these countries need.
2. The automobile industry in most of the markets identified by the industry in India is highly regulated and changes in regulation impact exports. The Indian industry is of the view that mutual

recognition agreements (MRAs) for the acceptance of Indian certification and regulations are required with all markets critical for India.

3. Africa and Latin America are highly prone to political and economic instability: Letters of Credit are not issued and even if issued, are not confirmed. The industry feels that the EXIM Bank needs to take the lead by providing financial support and covering this country risk so that these markets can be tapped.
4. Many markets, such as Nigeria and Algeria are dependent on commodity market Oil, and hence foreign exchange crises are common. To boost vehicle exports, India must consider barter arrangement / rupee trade with such countries, the industry feels.
5. While the vehicle industry has been seen as being opposed to FTAs, the sector feels that FTAs/ PTAs should be signed with markets of the world and not factories. In the case of automobiles, markets include Algeria, Libya, Nigeria, Kenya, South Africa, Egypt, Indonesia, Philippines, Chile, Peru, Colombia, Saudi Arabia, United Arab Emirates, Israel, Bangladesh, Sri Lanka, Nepal, Australia, Mexico and United Kingdom.
6. Many vehicle export markets are dependent on China because of its infrastructural development and hence the Chinese Government has a role in their policy making. To ensure better economic ties, the Government-to-Government dialogue needs to be enhanced in all exports markets by India, says the industry.
7. The vehicle industry believes that supporting these countries in developing an automotive industry policy and regulation and testing facilities for vehicles will give India a market advantage.
8. The MEIS at 2% needs to be continued until a new scheme that compensates at higher rate or at least equal rate is introduced. It compensates to a certain extent for duty disadvantage in exports markets.
9. Another issue faced by Indian exporters in markets of significance is that competitor countries have existing trade agreements with them, making Indian exports non-competitive. The MFN rates for India are high. Please find below a table that describes the advantage Indian competitors have over India in some of these countries.

Table 4.3: Duties in Major Indian Markets

Market	Competing Countries with Trade Agreements
South Africa	EU has preferential tariff duty of 18% vs 25% faced by India
Chile	Trade Agreements with Korea, Japan, China and Mexico
Peru	Trade Agreements with Thailand, Korea, Japan, China and Mexico
African countries	EU – Algeria FTA / Geographical advantages for EU, S. Africa
Australia	Trade Agreements with ASEAN, Japan & Korea
Mexico	Trade Agreements with EU, NAFTA, Pacific Alliance and Japan
ASEAN	ASEAN AFTA

Source: Ministry of Commerce

4.5.2 Auto component industry

The auto component industry, that is already part of the sector that has provided and received tariff benefits under the existing free trade agreements, have the two following recommendations for policy changes to benefit from FTAs. In short, companies may be allowed to avail the benefit by

producing an indemnity bond or avail of the benefit only after the COO is produced while it may transport the goods out of the customs bonded area.

4.5.3 Mechanism to avail customs duty concession/ exemption on goods imported under trade agreements

Customs duty exemption/ concessions are available on goods imported from various countries with which India has signed an FTA/CEPA/PTA. However, in order to avail the customs duty benefits on imports from these countries, the importer is required to present a Certificate of Origin (COO) to the Customs at the time of clearance of imported goods.

The overseas suppliers, the industry says, often cannot provide the Certificate of Origin as and when the goods are imported and there might be a delay of 7 to 10 days. So importers are forced to get the shipments cleared without availing the benefit due to urgency and/ or to avoid demurrage charges etc.

The auto component industry, therefore, is of the view that the submission of Certificate of Origin to the Customs authorities at the time of import is a procedural requirement and, therefore, importers may be allowed to claim the duty benefit as follows:

- Exemption ab initio be granted to the importer on submission of an indemnity bond with a condition of filing the Certificate of Origin within a set timeline
- Alternatively, the duty benefit may be granted post clearance by way of refund in case the Certificate of Origin is delayed. The above practice is followed in other countries as well.

4.6 Trade Facilitation

1. **Insufficient time for demurrage free customs clearance at airports:** The goods imported at various airports throughout the country are required to be cleared within three days. In case they are not, the importer is required to pay demurrage charges. ACMA is of the view that if the time for demurrage free customs clearance at airports can be increased to five days, it will be a major trade facilitation measure.
2. **Improving port facilities:** Most large ports in India have dedicated terminals for export of automobiles. Many of them have signed a memorandum of understanding with individual auto companies for the use of the port for export purposes. However, over the years the upkeep of some of these ports and the infrastructure around the dedicated terminals has deteriorated thereby making it difficult for car manufacturers to use these ports though they continue to use them because they have no other alternative.
3. **Mumbai port:** This is one of the largest ports. However, auto companies have an issue with the road between the storage/parking area and loading area (approach road to the port). This road, the companies point out, is of poor quality and is also a public road thereby causing loss/damage to the new vehicles for export. This leads to large level losses that need to addressed by the port authorities.
4. **JNPT:** The JNPT is one of the largest ports in India. However, industry officials point out that the narrow approach road leads to pile-up of traffic, and hence delays occur in trying to meet deadlines for export.

5. Most ports do not have dedicated parking areas for vehicle exports leading to several problems.
6. RO-RO (roll on and roll off) vehicles are very important to speed up automobile exports world over. However, auto companies are of the view that in Indian ports there are fewer RO-RO vessels than Europe and other destinations. That makes this an expensive facility for auto companies.

Procedural Issues/documentation

(a) To ensure that regular working capital is available for companies it is important to help exporters receive their claims at the earliest. Automobile companies point out that procedural delays in offices such as the Directorate General of Foreign Trade (DGFT) make this difficult for exporters. They are of the view that there is a need for simplifying the claiming of export incentives from DGFT. They have sought better IT infrastructure for paperless processing of export documents and better usage of ICE Gate system.
(b) Need for an alternative to MEIS that has been declared to be WTO-inconsistent. While the Remission of Duties or Taxes on Export Product (RODTEP) has been brought in, it does not benefit the industry in terms of remaining competitive in global markets. There is a need to look at other possible measures to improve competitiveness to boost exports.
(c) An important issue that is faced by industry in the trade facilitation arena is the longer lead times in documentation and processing at Customs/ports. This needs immediate attention to help move cargo faster for exports, industry officials said.

4.7 Conclusions

The suggested changes include issues related to policy focus to procedural simplification and facilitation issues. The broad areas of suggestion from industry and experts include:

1. *Changes in tax rates especially reduction in GST rates to help build a healthy domestic market that helps build a strong case for exports*
2. *Removing high tariffs on raw materials and intermediates to make the industry globally competitive*
3. *Providing support for technological advancement and R&D support to help industry remain at the top end of the technology curve globally*
4. *Choosing the right markets for free and preferential trade agreements to help build stronger market access*
5. *Regular bilateral discussions with markets of interest to boost market access to remove non-tariff barriers to export*
6. *Trade facilitation measures and removing procedural hurdles to make industry achieve lower turnaround times*

Grading of suggestions

The suggestions provided by the industry and experts in the area may be divided into three categories. Short-term or low hanging fruits, medium-term suggestions and finally long-term suggestions that may require greater stakeholder consultations.

Short term

The auto and auto components industry has been facing headwinds for long. Several issues have been hitting the sector in India: From moving towards higher emission norms and the fall in sales due

to lower economic growth to the challenges posed by electric vehicles. The biggest challenge that officials in the industry point to is the need to spur demand. One way to do this, industry insiders feel, could be by cutting the GST rates that will bring down the price of vehicles and second remove the anomalies of inverted customs duties in the sector. Since the anomalies and the high GST rates are well documented and the Government is fully aware of the situation, these changes can be implemented quickly. Given the fall in sale of cars globally due to various reasons, the industry is the of the view that rationalization of taxes can also help Indian industry compete globally.

Medium Term

The auto sector is completely driven by technology. In the medium term, the industry is of the view that there is a need for greater thrust towards greater R&D and design in the country. All possible policies that can spur R&D need to be put in place. The auto component sector has identified the following four areas for R&D thrust: a) Emission; b) Safety; c) Industry 4.0; d) Electric Mobility e) Increasing Electronics in Vehicles.

Long Term

Exports can only be built if market access is available. For this, the auto sector is of the view that there is a need to identify non-tariff barriers in markets of interest and hold specific bilateral discussions for their removal. Further, the sector has also identified specific markets where India could have free trade agreements for improving market access. The details of the such markets are provided in the note.

All these measures, the industry feels, will help India become a strong global hub for small cars.

CHAPTER

Electronics, With a Focus on Mobile Phones

"NPE 2019 aims to increase domestic value addition and combining potential of both domestic demand and export with the aim to make India a global hub of manufacturing."
-MeiTY Annual Report 2018-19, page 109

5.1 Introduction

India's Electronics System Design and Manufacturing (ESDM) sector is growing rapidly, with its total production more than doubling in the five years from 2014-15 to 2018-19 (see Table 5.1). In 2018-19 (till February 2019), domestic production of the ESDM was about USD 66 billion. However, India's domestic demand for these products is very high, and thus the country's imports are high. The comparatively small level of exports of ESDM resulted in a high sectoral trade deficit (Table 5.2).

Table 5.1: Production Profile of India's Electronics Sector (Percentage Share, ranking 2018-19)

	2014-15	2015-16	2016-17	2017-18	2018-19 (till February 2019)
Mobile Phones	9.9%	22.2%	28.4%	34.0%	37.1%
Industrial Electronics	20.7%	18.5%	19.6%	17.8%	17.7%
Consumer Electronics	29.3%	22.9%	20.4%	18.9%	16.8%
Electronic Components	20.9%	18.7%	16.4%	15.2%	14.8%
Strategic Electronics	8.25%	7.42%	6.54%	6.07%	6.17%
Computer Hardware	9.8%	8.2%	6.4%	5.5%	4.6%
Light Emitting Diode (LED) Products	1.1%	2.1%	2.2%	2.5%	2.8%
TOTAL (%)	100%	100%	100%	100%	100%
TOTAL (INR Crore)	1,90,366	2,43,263	3,17,331	3,88,306	4,58,006

Source: MeiTY, Annual Report 2018-19, Page 100

Table 5.2: India's Exports and Imports of Electronics Goods (2017-18; and 2018-19 till February 2019)

	2016-17	2017-18	2018-19, till February 2019
Exports	USD 5.96 billion	USD 6.39 billion	USD 7.90 billion
Imports	USD 42.88 billion	USD 52.89 billion	USD 52.71 billion

Source: MeiTY, Annual Report 2018-19, Page 105

The trade deficit for the ESDM sector during 2018-19 was over USD 45 billion, i.e. about one-quarter of India's total trade deficit during the financial year. This deficit is a major source of concern for policy makers because they realise that India's domestic demand is going to grow very rapidly, creating further pressure on India's trade deficit. The trade deficit in this sector is expected to become significantly larger. As noted by the National Policy on Electronics 2019 (NPE 2019), "With the demand for electronics hardware expected to rise rapidly to about USD 400 billion (approximately INR 26,00,000 crore) by 2025, India cannot afford to bear a huge foreign exchange outgo on import of electronics alone."

Against this background, the Government of India has planned a major initiative to create a strong domestic ecosystem and domestic production capacity for ESDM. The objective is to "promote domestic manufacturing and export in the entire value chain of ESDM for economic development to achieve a turnover of USD 400 billion (approximately INR 26,00,000 crore) by 2025. This will include targeted production of 1.0 billion (100 crore) mobile handsets by 2025, valued at USD 190 billion (approximately INR 13,00,000 crore), including 600 million (60 crore) mobile handsets valued at USD 110 billion (approximately INR 7,00,000 crore) for export" (Paragraph 4.1 of NPE 2019).

Within ESDM, the mobile phone sector has registered the largest growth and is now the most significant part of it (Table 5.1), accounting for over one-third the domestic production. This share is expected to increase significantly over time (likely to become almost half by 2025), as shown by NPE 2019. Furthermore, mobile phones are expected to play a large part in addressing the potential large trade deficit in the ESDM sector, with a significant increase in domestic production and exports of mobile phones (Table 5.3). The targeted increase in the value of domestic production by 2025 is 7.6 times the level in 2019. For exports, the target is huge, with an aim to increase more than 66 times the value in 2018-2019. In terms of the share of global exports of mobile phones, this implies an increase from about 0.5% in 2018-19 to about 17% in 2025.

Table 5.3: Domestic Production and Exports of Mobile phones, 2019 and 2025 (targeted)

	2018-19	2025 (Targeted)	Ratio of 2025 to 2019
Domestic Production	USD 25 billion	USD 190 billion	7.6 times
Exports	USD 1.66 billion	USD 110 billion	66.3 times

Source: ICEA and NPE 2019

Achieving this target requires a combination of a strategy that enables achieving the main objectives while creating an appropriate policy environment. Lessons from nations that have been successful in penetrating global markets within a relatively short period are useful in this context. For the mobile phone sector, China and Vietnam are of particular importance, being the top exporters of mobile phones. These nations have focused on creating opportunities in the global supply chain by focusing on specific sectors that they aim to promote. They then encourage investment by large "lead firms"[146] in these value chains around which they create a domestic eco-system for the industry and export efforts.[147]

[146] For a discussion of lead firms, see for example, https://www.cfr.org/blog/who-governs-global-value-chains and http://wtocentre.iift.ac.in/workingpaper/woriking%20paper%2036.pdf

[147] See for example, the discussion in Chapter 4 of ICEA, "Replacing MEIS With Smart Support Measures for the Mobile Phone Industry", A report by IKDHVAJ Advisers LLP, 2020.

5.2 Conceptual Framework to Promote Exports of Mobiles

This Chapter provides a basis to identify key aspects of the conceptual framework for priority action. This discussion takes place with a primary focus on the mobile sector but discussions with the industry indicate that the relevant policies are largely similar for the mobile sector and the ESDM sector as a whole. In certain instances, the specific policies relevant to the ESDM sector (other than the mobile sector), which the industry highlighted as priority areas for action, are specified with particular reference to ESDM in general.

The discussion begins with a consideration of the feasibility of the large export target for mobile phones, and then specifies the relevant policy areas that need to be addressed. The policies are identified in terms of the priority areas mentioned by the industry, low hanging fruits, (i.e. policies that can be effectively implemented within one year), policy initiatives with a dual impact (i.e. specific to the industry and with a wider implication for exports in general), and policies which are inconsistent, reflecting a negative bias towards exports.

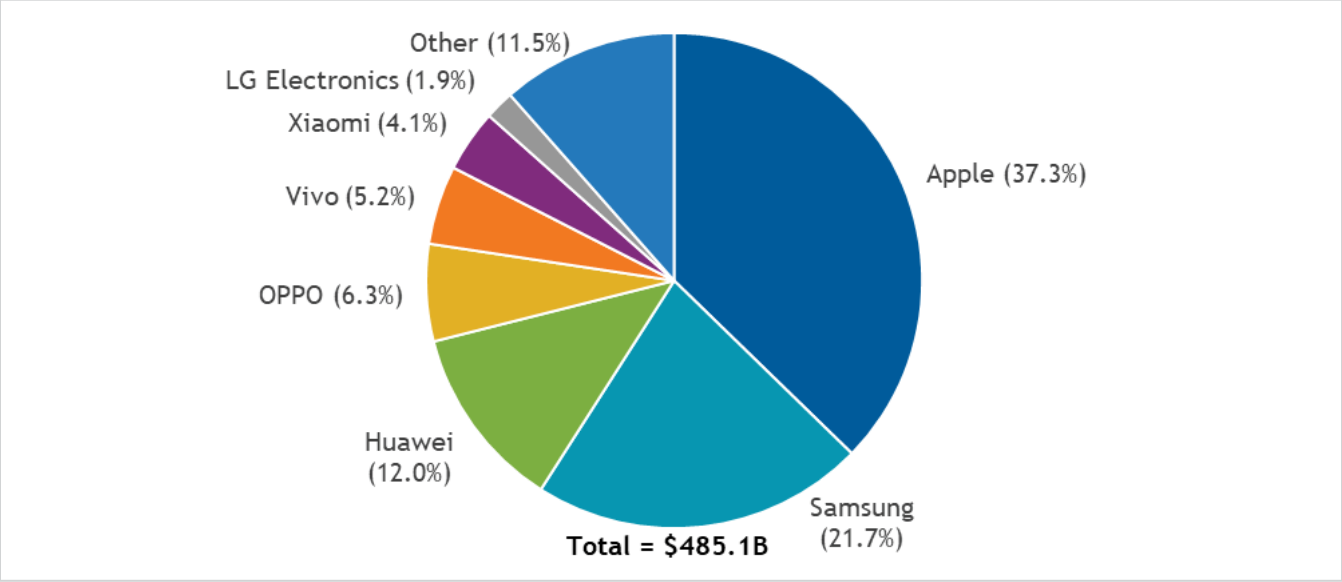
Appropriate strategy and policies required to achieve the huge export target

To increase exports of mobile phones, India needs to work in a focused way with lead firms in the global supply chains. Importantly, wherever these companies invest in a major way, they help develop an ecosystem over time by linking up with parts and component producers. Certain features of the mobile market make it possible for the value of exports to increase by about 70 times in five years.

The basis for this conclusion arises from the following:

1. The global mobile phone market is largely dominated by a few firms. The two main firms in terms of value of production are Samsung and Apple, with Huawei's presence being the third largest. Figure 5.1 shows the domination of three firms in the global market share in terms of revenues.

Figure 5.1: Global Market Share in Terms of Revenue, 2018



Source: IDC

2. The global market is divided into low-value phones and high-value phones. The major high value markets are the US and Europe. Other markets are a combination of high and low-value phones.
3. The growth expected in the future is likely to be mostly in the smartphone market. Apple and Samsung are a dominant presence in both smartphones and markets with a large demand for high value phones.

A noteworthy point here is that data on market shares differs among sources of data. Thus, the estimates discussed here should be considered in terms of a qualitative rather than an exact quantitative picture. What emerges is that a few top mobile phone brands have an inordinately large share in global markets, including the market share in major importing countries (Table 5.4). Thus, these brands have the ability to place their sales in high value markets as well as others.

Based on a detailed database with information on individual countries[148], we observe:

4. In 2019, globally the market shares were 31.37% for Samsung, 24.79% for Apple, and 9.95% for Huawei.[149] Just the top two, Samsung and Apple, have almost three-fifths of the global market.
5. Two markets, the EU and the US, together accounted for half the global imports of mobile phones in 2019, with respective shares of about 32% and 18%.[150]
6. The two largest companies with a major share of the high value markets are Apple and Samsung. In 2019, Apple had 55.55% of the US market, and Samsung 26.95%. Together they had about 83% of the US market.[151] LG, with a share of 6.01%, was a distant third.
7. Their corresponding 2019 shares in the European market were 34.19% for Samsung and 27.58% for Apple. Together, they had over three-fifths of the market in Europe.[152] The third largest presence was Huawei, with 18.17% of the European market.
8. These two companies are present in other major markets as well. For instance, if we focus on the top 25 importing economies for mobile phones (Table 5.4), the market shares of Apple and Samsung together account for about 60% of the combined import market share of these 25 importing countries.
9. In addition to major global lead firms, development of the ecosystem and domestic capabilities requires a focus on domestic lead firms as well. Both China and Vietnam have focused on this objective, because sustaining a major effort to gain a large share of global markets requires improving the capabilities of domestic producers as a key element for developing the domestic ecosystem.

Table 5.4: Top 25 Mobile Phone Importing Economies in 2019

Rank	Top Importers of Mobile Phone	Value of Imports, 2019	Share in Global Imports (%)	Market Share of Apple (%)	Market Share of Samsung (%)
1	United States	$53.9 billion	18.3	55.55	26.95
2	Hong Kong	$42.1 billion	14.3	44.55	24.84
3	Netherlands	$20 billion	6.8	40.18	37.09
4	Japan	$17.6 billion	6	66.52	6.61
5	Germany	$12.7 billion	4.3	29.07	40.99
6	United Kingdom	$11.2 billion	3.8	50.07	28.19

[148] This database is different from that used for Figure 5.1.
[149] https://gs.statcounter.com/vendor-market-share/mobile/worldwide/2019.
[150] http://www.worldstopexports.com/cellphone-imports-by-country/
[151] https://gs.statcounter.com/vendor-market-share/mobile/united-states-of-america/2019
[152] https://gs.statcounter.com/vendor-market-share/mobile/europe/2019

7	United Arab Emirates	$8.9 billion	3	21.58	37.67
8	Czech Republic	$7.2 billion	2.4	27.42	19.99
9	France	$6.7 billion	2.3	27.76	37.99
10	Russia	$6.3 billion	2.1	21.45	24.7
11	Canada	$6.1 billion	2.1	50.98	29.6
12	Austria	$5.9 billion	2	31.28	36.75
13	Slovakia	$5.6 billion	1.9	18.03	28.44
14	Italy	$5.5 billion	1.9	25.35	33.47
15	Mexico	$5.1 billion	1.7	14.03	28.03
16	Singapore	$4.9 billion	1.6	33.83	29.61
17	South Korea	$4.3 billion	1.5	24.72	64.18
18	Australia	$4.2 billion	1.4	53.26	24.93
19	Spain	$4 billion	1.4	18.92	28.28
20	Thailand	$3.8 billion	1.3	23.72	26.96
21	Sweden	$3.6 billion	1.2	50.09	29.3
22	Taiwan	$2.9 billion	1	43.24	20.03
23	Poland	$2.7 billion	0.9	4.36	32.32
24	Malaysia	$2.7 billion	0.9	17.02	23.05
25	Vietnam	$2.6 billion	0.9	37.05	30.25

Sources: https://gs.statcounter.com/vendor-market-share/mobile/world/2019 and
http://www.worldstopexports.com/cellphone-imports-by-country/

5.2.1 All major mobile phone producers of mobile phones are present in India

All the major mobile phone exporters, including Samsung, Apple and others are present in India. Thus, the key aspect of policy is to focus on creating conditions to support and incentivise these global firms, through a policy environment which enables major exporting companies to invest at a higher level, focus on using India as an important export base, and work towards creating an ecosystem which supports such large export efforts.

A specific focus is required on a number of policies in the context of mobile phones and other electronics, with a focus on the major global and domestic firms. The Government has on 21st March 2020 announced a scheme along such lines. The details of the support/ incentive policies under this scheme and its effective implementation will determine the impact on exports of mobile phones.[153]

5.3 Policies that will help Create the Momentum for a Large Export Initiative

The strategic focus on lead firms needs to be combined with policies oriented towards improving the competitiveness of Indian exporters and boosting the attractiveness of investing in India for lead firms and others linked within the ecosystem for mobile phones. In line with the discussion in Chapter

[153] Three separate schemes have been announced. Details are in Annex 5.2 of this Report. For each of the three schemes, see https://pib.gov.in/PressReleseDetail.aspx?PRID=1607489,
https://pib.gov.in/PressReleseDetail.aspx?PRID=1607489, and
https://pib.gov.in/PressReleseDetail.aspx?PRID=1607489

1, these policies should:

- Improve incentives for investment, production and exports, and
- Reduce disincentives for investment, production and exports.

The main incentives given by major competing economies are shown in Annex Table 5.1. Of these, the policies with relatively more significant effects are reductions in income tax, power cost, interest subvention on working capital, and factors affecting the ease of doing business. A notable feature for Vietnam (an important competitor in the global mobile phone market) is the duty-free import of machinery and equipment that is not domestically available. In addition, the Vietnamese Government makes a strong effort to facilitate the establishment and operation of the enterprise, particularly for firms which are global brands or those which make significant investments. There is a major emphasis on providing "plug and play" facilities with good connections to ports and airports, which makes it easier to establish and operate the production/ export activities.

5.3.1 Policy disabilities that increase costs and reduce competitiveness

According to India's Electronics and Computer Software Export Promotion Council (ESC), the disabilities faced by the electronics industry are:

"factors related to cost of power, infrastructure/logistics, cost of finance, etc., cascading of multiple state and central levies and above all the high transaction costs. All these adversely impact competitiveness in the domestic and international markets. The Indian electronic hardware manufacturers experience a higher level of taxation, cost of power, finance and freight and poorer infrastructure compared to their competitors from China, Taiwan, Korea and Japan. Consequently the cost of production of most electronic goods in India is 8-10 % higher in entire value chain in graded trend."[154]

Other difficulties include an inadequate ecosystem, an inverted duty structure, improvements needed for the ease of doing business, absence of warehousing, need to subsidise capital costs and R&D costs, and absence of high economies of scale.[155]

Even during the early part of the decade, the "Strategic Plan of Department of Information Technology for the Next Five Years" noted that: "There are a number of disability factors such as high level of taxation; high cost of power, finance & freight; inadequate infrastructure; high transaction cost, etc. which render indigenous electronics hardware manufacturing uncompetitive and discourage capital intensive and large level of investments."[156]

The factors identified above, especially those by the Export Promotion Council, indicates that the list of policy disabilities and interventions is a long one, and that not all the identified steps are of similar significance. Therefore, there is a need for specific focus on identifying policy interventions considered a priority by the industry, and those which are low-hanging fruits.

[154] Page 35 of the publication, Electronics and Computer Software Export Promotion Council, "India's Computer Software & ITeS and Electronics Export: Strategy Paper and Business Plan", New Delhi.
[155] Pages 35, 40, 42 and 44 of ibid.
[156] Page 16, https://meity.gov.in/writereaddata/files/Strategic_PlanDIT_FINAL_110211.pdf

5.4 Three Key Parts of the Framework to Identify and Address Policies that are Obstacles to Exports

The discussion below begins with the policies which have been identified as priority areas to be addressed for improving exports performance. In a number of cases, these policies are also of general relevance to the improvement of competitiveness and the ease of doing business. These priority areas are mostly identified by exporters in terms of policy orientation or shortcomings. Three distinct insights which need to be considered as part of the overall approach emerge from discussions with exporters.

First, the policy concerns identified by exporters could be considered within a framework which combines four linked steps of redressal:

1. The first step is to identify the specific feature of domestic policy or the measure which needs to be corrected.
2. The next step is to identify tangible and actionable focus areas as examples of policies/ measures which need to be addressed to reduce/ remove obstacles to India's exports.
3. The third step is to consider the two above-mentioned points as a "living list" to be monitored for action. The industry could add to the list additional examples of measures which create an obstacle for exporters and need to be removed/changed.
4. Policy makers can use the abovementioned framework in at least two different ways.
    - First, they can identify policy approaches which are common across several sectors, e.g. initiatives which improve the ease of doing business. These policy areas should be part of the priority areas for improvement.
    - Second, they can prioritise addressing within a short, specified time period, the concerns which remain relevant over an extended period of time.

Second, an important general point is that even after good policies (or improvements to policy) are notified by the Government, they are not properly implemented. This negates the intent of the policy either by non-implementation or by the lack of a consistent interpretation of the operational requirements.

Third, the organisation/ person implementing policies that affect exports does not view exports as the main (or exclusive) objective. Thus, the impact of the actions on exports is usually not taken into account. In fact, the policy may develop or be implemented in a manner which has a negative impact on exports.

The exporters interviewed were of the view that there is evidence of an anti-export bias even among those with direct involvement in trade governance who are part of the Government (See Annex 5.1 for an example of anti-export bias). This is because exports are not a primary objective emphasised by Government. Just as the Government has emphasised Trade Facilitation as a national objective by setting up a co-ordinating National Committee, it should make a similar effort for exports with a six-monthly review by a Ministerial Committee chaired by the Prime Minister. Exports require co-ordinating with several Ministries and Departments, which have their own priority objectives. Exports must also become part of the objectives of these Departments, especially those which directly deal with policies affecting export performance.

The discussions with exporters provide a basis to focus on priority areas of policy, low-hanging fruits, and other specific examples of policies that need to be improved, removed or better implemented to improve export performance. These are discussed below.

5.4.1 High priority areas of policy concerns identified by industry/exporters

The industry/ exporters of electronics including mobile phones have identified certain policy areas which create the most significant adverse impact on them. If these are addressed, the facilitation and competitiveness of exports will be significantly improved.

The high priority areas are emphasised by the major exporters, particularly the firms of foreign origin. While several of these are relevant to domestic firms as well, the domestic mobile phone producing firms have identified some additional high priority areas relevant mainly to them.

The priority areas for foreign and domestic firms include:
1. **Support similar to that provided in competing economies,** e.g. disabilities in comparison to Vietnam and China are respectively 9.4% to 12.6%, and 19.2% to 21.7% -see Annex Table 5.1.
(a) Income tax exemption/ refund.
(b) Lower costs of land, development of land and building; accommodation for **labour;** lower cost of power and uninterrupted power supply.
(c) Financial and policy support for exports (like **MEIS or similar policies**).
(d) Financial and policy support for capital investment (like **M-SIPS or similar policies**).
(e) Financial support for working capital (interest subvention), training of workers, R&D and Design, the establishment of supply chains/clusters, skill building.

It is noteworthy that the Government of India has begun implementing a number of these policies (see Annex 5.2). The impact of these policies will depend also on their details and the effectiveness with which they are implemented in a timely manner.

5.4.2 Stop changes in the Customs notifications that introduce the change with retrospective effect

A number of changes notified by Customs in the operational conditions for exporters specify that the changed conditions apply with retrospective effect. This creates uncertainty and disrupts operations. It also impacts the fulfilment of contracts with international clients. These factors create a burden in the form of higher costs for the exporter. Further, in certain situations, the condition for retrospective effects is practically impossible to achieve, as illustrated by certain examples in the discussion below.

5.4.3 Remove/ reduce ambiguity in taxation

On several occasions, different officials of the implementing agency interpret tax conditions differently. Examples of this are provided below. There is a need to either provide an accepted general explanation, or a quick remedial process that clarifies the legal requirement when inconsistencies arise for exporters.

5.4.4 Address delay in refunds

Refunds of GST and Customs Duty (and Provision of the Subsidy that is agreed by the Government) must be addressed. Though delays in duty refunds have been increasingly addressed, there are still widespread concerns.

In this context, it is worth noting that one of the factors considered for the ease of doing business index (Annex Table 5.2), is "time taken for getting VAT refunds". This factor, i.e. "time taken for getting VAT refunds", corresponds to the ease of refund of GST in India.

In addition to GST, there are other financial aspects which are important for the ease of doing business. These include a timely receipt of the subsidies which the Government has agreed to provide to the exporters. There are instances where major exporters have not received the promised subsidy even after a number of years.

The delays occur for various reasons. For example, one reason is an insistence on the submission of physical documents. Electronic document submission is not enough for the process, and in several instances, physical documents must be submitted for verification. Another reason is the lack of clarity on the legal requirements, or inconsistent interpretation of the legal requirement. Yet another reason is that the Government official is concerned that his/ her action could be questioned even when the intent is to implement the policy properly. Thus, the reasons for the delay differ and the specific reasons should be identified so that relevant solutions can be devised to reduce the delay.

GST on capital (buildings and capital goods) and services is not refunded under the GST policy

An important point in this context is that exporters operate within the context of a value chain which combines goods, services and technology. The inputs in the value chain include capital expenses and services as well as manufactured goods. There is a good case for the refund of GST on capital and services used to produce mobile phones, because it will enable the producer to avoid being double-taxed on exports[157] and better compete with imports through domestic production.

The refund of GST on capital goods used in the process of production could be seen as a problem in the context of exports due to the WTO condition[158] that the refund of indirect taxes on capital used for exports must be classified as an export subsidy. However, if the refund is provided to all transactions and not only to exports, then the measure would not be WTO-consistent.

Remove inverted GST duties

Exporters mentioned this as an important concern. Various components (e.g., covers, batteries, headphones) had higher GST than mobile phones, leading to negative cash flow and an increase in working capital requirements. This resulted in the loss of competitiveness and reduced the ease

[157] Indirect taxes on exports are rebated or refunded under the principle that the product will be subject to indirect tax in the market importing the product. Non-refund of the tax would result in double-taxation on the exported product.
[158] This is under the Agreement on Subsidies and Countervailing Measures.

of doing business. Recently, the Government has removed this inverted duty by raising the GST on mobile phones. This has raised concerns for some producers, including domestic firms, that the higher duty on mobile phones will reduce demand. The continuation of the GST on inputs will also keep the working capital tied up till that GST is refunded.

5.4.5 Important to consider the implication of various policies on cost of working capital

Annex Table 5.2 provides the factors that affect ease of doing business according to the World Bank. This shows that importance of countering the potential adverse impact of specific policy measures on the cost of working capital. According to exporters, this aspect is not adequately captured within the policy framework. The issue of working capital and inventories is particularly relevant for an industry which has an extensive supply chain. The mobile phone sector has several suppliers within the value chain, and these suppliers in turn have their own value chains and linked suppliers. The large number of supply chain linkages implies a major emphasis on the co-ordination of inventory for each part of the value chain. This results in a major significance of working capital for mobile phones throughout the chain. Any policy which affects the working capital in such a situation has a significant impact and affects many linked producers of the supply chain. Many of them are small suppliers, and therefore more vulnerable to additional burden on working capital.

5.4.6 Create a real single-window system for the multiple approvals required

Multiple Ministries and Departments are involved in the regulation of different activities relating to mobile phones. While a single window has been created for international trade at the overall level, it is necessary to have the nodal Ministry for a specific industry to be the single window to co-ordinate with all other Ministries/ Departments at the Central and State level relevant to improve policy impact and facilitation.[159]

5.4.7 Do not make changes in policy without due examination of the implication for exports

A very important point emphasised by exporters of mobile phones is that, in their experience, policy changes are made without any consideration to the impact on exports.

It is important to include within the policy process an evaluation of the policy's impact on exports.[160] The Government of India has emphasised exports as an important national policy, but the implementation is not carried out with this in mind. The significance of exports could be established in a practical way by including an assessment of the implication of policy change on exports.

5.4.8 Develop an Index for Ease of Doing Business for Exports

Taking into account the priority areas of action and low hanging fruits, a specific index of the ease of

[159] These could include MoC, MoF, DPIIT, MeiTy, MoEF, Customs, GST, PCB et. The co-ordination may be required even at secretary level and in some case up to the Minister level.

[160] Such impact analysis is part of the policy formulation in certain jurisdictions, for example in the EU such impact assessment is conducted for the effect of the policy on the environment.

doing business for exports could be developed. The aim would be to improve policy impact (based on this index) as applied to certain selected industries and then developing and applying the index to a wider set of industries.

5.4.9 The priority areas emphasised by domestic firms

A. For domestic firms, a priority concern is easier access to funds and a reduced cost incurred for those funds. To address these concerns, the domestic firms, including the largest domestic mobile phone firms emphasise:
   - Easier access to loans.
   - Credit Guarantee and Interest Subvention Scheme for the domestic industry.

B. Create a National Design Ecosystem for mobile firms. This is very important to improve domestic capacity and content.

C. Revamp the Electronics Manufacturing Clusters (EMC) Scheme. The EMC scheme has not been a success. EMCs have not been able to develop the scheme because they have not been able to develop utilisable plug and play situations. The exporters have suggested the following:
   - Build the infrastructure and provide the necessary clearances to set up a manufacturing unit at one go in a time bound manner.
   - Provide plug and play facilities to investors.
   - Combine such clusters with ongoing schemes such as the Sagarmala Project of the Ministry of Shipping, or Costal Economic Zone.

On 21st March 2020, the Government has announced a new policy initiative on EMC, i.e. an EMC 2.0 scheme.[161]

5.5 Low-hanging Fruits

Certain policy measures which cause disruption to exports or increase costs or operational procedures can be removed or improved relatively quickly. These are the so-called low-hanging fruits.

5.5.1 Customs practices

The largest number of concerns arise due to customs practices. The discussion here provides the main types of obstacles due to the Customs Department's practices. Later in this section, specific examples are provided to illustrate these concerns. The practices mentioned by exporters lead to additional costs, procedural complications and operational uncertainty, thereby reducing competitiveness. The difficulties arise largely due to a combination of the five factors mentioned below.

1. The coverage of the HS category (under which an input imported duty-free), is too broad or covers products with the same nomenclature being used for different end-uses. This opens the way for:
   - A difference of opinion between Customs and the importer about the end-use of the product or whether the imported product is actually the product for which duty is exempted.
   - Arbitrary decision-making in such a situation, causing time delays and procedural difficulties.

[161] https://pib.gov.in/PressReleseDetailm.aspx?PRID=1607490

- Duties are charged when the import should have been duty-free, thus leading to an increase in costs and blocking the intent of a policy that was meant to facilitate production by giving duty-free treatment to imported inputs.

2. The insistence on retrospective application when a change in policy results in a rise in customs duty. In a number of cases, Customs demands duty on products imported prior to the date when a change in duty is imposed.
3. When the retrospective application of duty takes place, the importer/ exporter does not get redressal from Customs if there is a need to amend any decision that is questioned and corrected. The importer has to go through the courts to get the concern addressed. This adds a further burden due to delays, additional costs and uncertainty. In the context of global value chains, where imports are an important part of the competitive input package, such a practice leads to a lack of competitiveness.
4. The mindset of Customs is to focus on revenue generation, irrespective of a negative impact of its actions on exports. Adjustments or corrections that are introduced lead to additional problems arising from the approach; the approach emphasises increasing revenues without any consideration of the impact of the Customs' practice on exports. Examples include:
   - An increase in Basic Customs Duty (BCD) on a product takes place, and this is followed by higher duties sought retrospectively.
   - A change in classification to improve coverage and implementation, without addressing the problems with previous transactions.
5. Changes in policy are made without adequate consultation and feedback from users.

5.5.2 Systemic improvements that could be achieved within a short period of time

The five points above suggest that in addition to addressing specific areas of concern, the system itself needs to be improved to ensure that the problems arising at present do not keep repeating themselves. This could be considered a priority issue to be addressed within one year.

In this context, the industry has raised certain issues for systemic improvements. An example is the IGCR rules. The industry is of the view that the law is not clear and thus open to arbitrary interpretation. Further, the ICGR rules do not allow for conventional methodologies such as an allowance for wastage being part of the calculation. Allowing for wastage is a common practice in other jurisdictions and in accounting rules and methods. Providing an allowance for wastage in the Indian IGCR rules is a low-hanging fruit. Other steps to clarify the law and its practice may require a much longer period.

5.5.3 Other examples of low-hanging fruits

Another illustration of the five points made above is the notification of Phased Manufacturing Programme (PMP), which provides a chronological sequence for the introduction of Basic Custom Duties (BCD) - see Table 5.5. Under PMP, the objective is to sequentially promote the domestic production of cellular mobile parts and components by imposing BCD to create a protected domestic market for the notified product. To support the production of the protected product, the Government has notified that imports of the parts/ components of the product protected by BDC increase are to be allowed duty-free to encourage domestic production of that product.[162]

[162] The notification is at
http://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2017/cs-tarr2017/cs57-2017.pdf

Table 5.5: Introduction of Basic Customs Duty Under PMP

Year	Sub-Assembly
2016-17	(i) Charger/Adapter, (ii) Battery Pack, (iii) Wired Headset
2017-18	(iv) Mechanics, (v) Die Cut Parts, (vi) Microphone and Receiver, (vii) Key Pad, (viii) USB Cable
2018-19	(ix) Printed Circuit Board Assembly, (x) Camera Module, (xi) Connectors
2019-20	(xii) Display Assembly, (xiii) Touch Panel/Cover Glass Assembly, (xiv) Vibrator Motor/Ringer

Source: https://meity.gov.in/writereaddata/files/Notification_PMP_Cellular%20Mobile%20Handsets_28.04.2017.pdf

Note: The indicative list for Mechanics and Die Cut Parts is provided in the Annexure to the notification.

In certain cases, the parts and components are in the same list of PMP as the product which includes them. This may happen because certain parts or components that have their BCD increased are also independently produced for sale.

A specific example is the list of products covered under PMP for the year 2018-19. Printed Circuit Board Assembly (PCBA) includes a camera module and connectors as its important components. Increasing tariffs for each of these items caused difficulties for the producers/ exporters of PCBA.

As notified, the programme has led to confusion between parts of the cellular mobile phones and parts of the parts (such as parts of PCBA). Sub-section below provides an explanation of these issues and then provides examples of the concerns that arise due to such confusion as well as the emphasis given by Customs to revenue generation without necessarily considering the impact on competitiveness or export performance.

5.5.4.i PMP and related Customs notifications

A key document for implementation of PMP is Customs notification 57/2017 of 30th June 2017.[163] An important principle used in this notification is that duty on inputs or raw materials would be zero (see products covered by serial numbers 5 to 8 of notification 57/2017). Over time, duty was increased on specified parts and components through various notifications of Customs.

The feedback from exporters on the Customs practices which are an obstacle to exports, mentions specifically Customs notification 57/2017 of 30th June 2017, and its later amendments that introduced customs duties on selected products. These included Customs notifications 22/2018 of 2nd February 2018,[164] 37/2018 of 2nd April 2018,[165] 40/2018 of 2nd April 2018,[166] and 24/2019 dated 6th July 2019.[167]

[163] http://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2017/cs-tarr2017/cs57-2017.pdf
[164] http://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2018/cs-tarr2018/cs22-2018.pdf
[165] http://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2018/cs-tarr2018/cs37-2018.pdf
[166] http://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2018/cs-tarr2018/cs40-2018.pdf
[167] http://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2019/cs-tarr2019/cs24-2019.pdf

5.5.4.ii Parts and components of Mobile Phones

The feedback from exporters has focused on products such as connectors, camera modules, microphones, receivers, covers (front, middle and back covers), and lenses. Classification problems arise because the same nomenclature may cover more than one category of product. An example of this is the "connector".

A certain type of connector is used in PCBA[168], but another type of connector is used in cellular mobile phones.[169] They are different in their designs. Earlier under notification 57/2017, import of connectors was allowed duty-free. Imports of connectors were specified duty free also under List 20 of notification 50/2017 of 30th June 2017.[170]

Amendments to 57/2017 were made by notification 37/2018 of 2nd April 2018.[171] The amendments resulted in a BCD of 10% being imposed on connectors used for cellular mobile phones (under Serial No. 5B of 57/2018, as amended by 37/2018).[172]

Imports of connectors used for PCBA were allowed in duty free (under Serial No. 6A of 57/2018, as amended by 37/2018). However, Customs officials have often treated different connectors in the same way and insisted on duty being paid on the product imported under the same nomenclature.

The issue of wide scope of coverage arises also for other parts and components under the same nomenclature (e.g. microphone, camera, covers). Imports of a part of the product under a given nomenclature are subject to Basic Customs Duty under the notification, while another under the same nomenclature is allowed duty-free.

Furthermore, the situation gets complicated because the tariff classifications of certain inputs have also changed over time. These features have led to problems with respect to the Customs' practices. For example, connectors which are used exclusively and solely for PCBA manufacturing are classified under HS category 8536. The connectors which are used solely for cellular mobile phones are classified under HS category 851770990. The duty level depends on the assessment and interpretation of the Customs official on the tariff line applicable for a product under the same nomenclature, e.g. connector or camera.

5.5.4.iii Customs' Practices That become Obstacles for Export Competitiveness

Keeping in mind the points explained above, the concerns raised by exporters could be considered as follows.

[168] Connectors used in the manufacture of PCBA form part of the Design and Circuit Boards. They are an integral part of the Surface Mount Technology (SMT) process of PCBA manufacturing. For an explanation of SMT, see https://www.pcbcart.com/article/content/pcb-assembly-process.html

[169] For mobile phones, the connectors are mainly to interface with the hardware and the Boards for various activities. They are also known as Flexible Printed Circuit (FPC) Connectors.

[170] http://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2018/cs-tarr2018/cs40-2018.pdf

[171] http://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2018/cs-tarr2018/cs37-2018.pdf

[172] Similarly, amendments to List 20 of 50/2017 were made through notification 40/2018 of 2nd April 2018. It stated that: "(ii) in List 20, for the word "Connectors", at both places where they occur, the words "Connectors other than those of cellular mobile phones" shall be substituted." See http://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2018/cs-tarr2018/cs40-2018.pdf

(a) Misclassification in revenue notification and absence of corrections:

- Notification 57/2017 and its later amendments have led to several problems and litigations due to wrong and/ or incomplete classifications. No results have been observed as yet, despite representations and meetings on this issue.

(b) Ad-hoc interpretation of legal requirements. Different officials or notifications provide different interpretations of the applicable tax condition:

- While Customs notification 57/2017 allows **parts and components of PCBA** to be allowed duty-free, later notifications impose duties of specific parts and components. For imports of parts and components of PCBA, Customs asks for payment of BCD. Two reasons are used by Customs for the duty on parts and components of PCBA.
- For **connectors** used in PCBA, Customs relies on its notification 40/2018 (amendment of list 20 of 50/2017) to claim that the connectors used in the manufacture of PCBA should also be charged BCD as the notification does not exempt the connectors used in cellular mobile phones. Customs is thus considering the PCBA connectors similarly as the connectors for cellular mobile phones.
- For **microphone** used in PCBA, Customs imposes a 10% duty on the grounds that it is allowed to do so after changes made by introducing Serial No. 18 of notification 57/2017 (as amended through notification 22/2018 of 2nd February 2018).[173] The industry points out the separation of the parts and components of cellular mobile phone and PCBA specified in notification 37/2018 of 2nd April 2018. However, BCD demand is still made by Customs.
- The confusion between parts and components of cellular mobile phone and of PCBA leaves it open for Customs to determine the Basic Customs Duty on products with similar nomenclature.
- Camera module: A clarification was made on the coverage of camera modules used in the manufacture of mobile phones in such a way that it was covered under "Digital Camera" (8525 80 20). This is a very wide category open to interpretation by individual Customs officials.
- A 12% GST rate for lithium ion Batteries is applied when they are imported for manufacture of mobile phones. This rate of 12% has been validated as being correct by a letter from a Customs Commissioner's Office and by an advance ruling by a relevant Authority on this matter. However, subsequently, a team from the "Customs Preventive" Branch from the New Customs House, Delhi contested this 12% duty rate and claimed that these batteries for the manufacture of mobile phones are to be imported at a GST of 18% irrespective of the usage of the product.

5.5.4.iv Changes in the Customs notifications, and BCD applied with retrospective effect

The discussion in sub-sections 1.c.i and 1.c.ii show that the BCD specified in the main Customs notifications have been changed (increased) with amendments notified at a later date. This has created a confusion for industry among others due to demand by Customs for duties in certain cases on a retrospective basis. Feedback from exporters shows a number of instances of higher BCD notified at a subsequent date being demanded on a retrospective basis. Examples include:

- Based on the amendments made by notification 24/2019 dated 6th July 2019[174], Customs is asking for retrospective duties on certain parts/components of PCBA.

[173] http://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2018/cs-tarr2018/cs22-2018.pdf
[174] http://www.cbic.gov.in/resources//htdocs-cbec/customs/cs-act/notifications/notfns-2019/cs-tarr2019/cs24-2019.pdf

- Exemptions provided under Customs notification No. 57/2017, Sl. No. 6A were earlier not allowed for **microphones and connectors.** This was an anomaly which got rectified effective 6th July 2019. After that, Customs continues to demand duties applicable for the past period.
- **Covers, lens:** The classification was 85177090. From 1st Feb 2018, the classification changed to 39209999. **Customs is demanding differential higher duty for clearances made prior to 1st Feb 2018 when it was classified under 85177090.**
- Duties on **receivers** has been demanded for the past period (1st July 2017 up to 1st Feb 2018).[175]

5.6 Other Policies that are Low Hanging Fruit

5.6.1 IGST does not flow into GSTN directly

As per the current practice, the information on IGST paid by an enterprise does not flow into the GSTN system directly. This leads to a situation where importers are required to feed the data manually into the GSTN. This is an extremely cumbersome and time-consuming process. It also potentially leads to avoidable manual errors.

5.6.2 Inverted basic customs duty rates

Customs duty rates on parts and components (and their parts and components) generally vary between 5% and 20%. At times this leads to inverted duty rates. As shown by Table 5.5, the sequence of customs duty increases includes duty increases for parts and components before the higher duty is imposed for products of which they are inputs. This needs to be addressed to reduce the adverse impact on operating costs.

5.6.3 Delays in GST refunds

The delay in GST refunds remains a concern for many producers/ exporters. The Government has tried to improve this situation in a focused way, but more effort is needed to monitor and address the gaps that remain.

5.6.4 Denial of GST refunds on capital expenses and services[176]

Capital products and services are an important part of overall costs. The main competing economies try and reduce the cost burden on account of building/ equipment and services that are inputs.

5.6.5 Improve the Advance Authorisation Scheme

The exporters have mentioned that the value addition criteria in the scheme should be significantly reduced.

[175] Receiver for cellular mobile phones were classified as part of mobile phones under category 85177090 and cleared at a concessional BCD of 5% as per Customs notification 50/2017, Serial No. 499. This rate changed on 2nd February 2018 and the BCD on receiver used for cellular mobile phones increased to 15%.

[176] Instead of refunds, the GST paid on capital goods is allowed to be adjusted against what the producer/exporter owes the Government. In a situation with inverted duties or if the amount owed is less than the GST amount on capital, the producer/exporter is a net loser.

5.6.6 Establish a special corridor

Establish a special corridor with facilitation for export trucks to move through Delhi, Chennai or other places where the airport is within a relatively short distance from the factory.

5.6.7 SEZ

Three types of facilitating steps could be implemented for SEZs as a low-hanging fruit for policy improvement.

a. A number of SEZs are not in active use. After the WTO Panel decision on export subsidies, a case which India has lost, the main benefit of SEZs is not based on export-related subsidy but as a nodal point for enabling easier exports/ imports and the use of common facilities (including a bonded warehouse). This implies that the SEZ would in large part become like an industrial zone. It is important to expedite the debonding of the SEZ land and facilities so that the available resources (including land) can be utilised for investment similar to that in the Domestic Tariff Area (DTA).
b. There is a need to facilitate the interaction of SEZs with DTA. To the extent that producers in SEZ import inputs and make the product that incorporates them, they should be allowed to sell this product in the domestic markets after paying the relevant duties on inputs imported and embodied in the finished product and not the Basic Customs Duties applicable on imports of finished goods. Such a change would put them on par with those in the DTA producing the finished product.
c. Reasonable and facilitating regulatory systems should be implemented in the process of debonding and an investor acquiring the existing unused assets within the SEZ. Instead, a burdensome approach is at times followed. Consider a real-world example: A company is acquiring the factory in Nokia Telecom SEZ (Chennai). The valuation of assets is important to assess duties and taxes. For this transaction, which is taking place end-2019 or early 2020, the authorised office stated that the depreciated value of the plant, machinery and building should be taken in terms of a depreciation until 2015, since the factory stopped functioning that year. This approach appears to be unreasonable, since the building, plant and machinery are being acquired in 2019/ 2020. Further, it increases the costs involved in acquiring a facility which has been non-operational since 2015.

5.6.8 Inordinate delays which increase costs

These include:

- Approvals to set up manufacturing units have generally taken 12-20 months, compared to about 4 to 6 months abroad;
- Delay in fixing "brand rate" of duty drawback, i.e. reimbursement when the input tax is more than the All India Rate of drawback;
- MEIS of 4% has not been paid by the Government after the notification was made in 2019 that there will be a change in the MEIS rate from January 2020;
- For refunds, Customs issues a scroll to the banks on payment to be made to specific accounts. There is a long gap before the money comes into the exporter's bank account. Exporters suggest that the process be expedited by sending an SMS to the banks confirming that a refund is to be made to a specified account.

5.6.9 Inadequate consultation with exporters

A number of the problems noted here could be addressed by a combination of two practices which are internationally considered a part of "good governance" or "good regulatory practice". One is a clear specification of the scope and meaning of the legal requirement so as to avoid ad-hoc interpretation. The second is to promote clarity based on a process of consultation on the proposed policy measures to be implemented. This would help the policy maker remain abreast of the likely operational problems and also the impact of the policy on exports.

5.7 Examples of Issues already Identified for Improvement which have not been Adequately/ Satisfactorily Implemented

The Government has been working for some time to improve the operational conditions of mobile phone producers/ exporters. A number of the initiatives overlap with those discussed above as priority areas to be addressed or low-hanging fruits. While the Government has identified relevant issues for improvement some time ago, several more remain to be addressed. This shows the need for a concerted effort to comprehensively ensure timely policy implementation.

Several policies have been identified for improvement by the Government which, according to the industry, have not been adequately implemented. These include:

5.7.1. Implementation of pre-specified timelines for Single Window Clearance in a co-ordinated manner between Centre and State, and among Central Ministries/ Departments.

The exporters have suggested that an effective single-window system should be established in the nodal Ministry/ Department for this purpose, combined with a monitoring mechanism to identify progress in implementation. This will make the single window more specific to the sectors concerned and provide focus to the co-ordination and implementation process.

5.7.2 Removal of anomalies/ inconsistencies between different policies, particularly with parts of the supply chain for the product concerned, e.g. mobile phones.

An example of a specific point in this context is that GSTN and ICEGATE data is not always synchronised. In addition, greater clarity is required on certain policies and norms, such as SION norms.

5.7.3. Removal of policy-related obstacles to exports with the objective of enabling them to meet standards, labelling and marking requirements in major markets

In this regard, two key aspects of penetrating major export markets are:

- Standards and labelling and marking requirements must meet those demanded in the markets to which exports are sold. A number of exporters have pointed out that Indian requirements for standards and labels for electronic products are sometimes different from those required by major markets. Nonetheless, such differences have remained. This has resulted in certain instances for a need to change the labels etc. on the package/ product at high seas during transit outside the country, which increases costs and reduces competitiveness;
- Products (including parts and components) certified by international mobile testing labs should be recognised by India to facilitate participation in international supply chain operations.

5.7.4. Rollout of a new incentive policy in lieu of MEIS, and specify criteria for very large firms as a special category

A new policy of RoDTEP has been announced. However, estimates suggest that RoDTEP for electronics, including mobile phones would be between 0.5% and 1%, i.e. much lower than the MEIS rates of support. The Government has been working on a more comprehensive support policy for the sector for several months now. The Government has made a major effort in this context for the electronics sector, including mobile phones. A new support policy has been announced on 21st March 2020 for this sector (see Annex 5.2). **The key is to ensure that its implementation takes place in a timely and effective manner.**

In the context of support and facilitation policies for large firms that would help create an export hub, one feedback was that a very high level of investment threshold should be specified for major firms that would create major export hubs. The present investment thresholds for mega-firms are relatively lower than what could be considered, i.e. about USD 150 million or more (i.e. INR 1,000 crore or more).[177] Further, since such large firms need to increase capacity over time, the location should be provided so that capacity could be incrementally raised over time.

5.7.5 Need for the de-notification of SEZs so that the resources and land can be used for industrial activity, part of which would be focused on exports

The delay in the process is long, i.e. over 6-12 months. Better co-ordination efforts within a specified timeline are needed between multiple agencies and processes involved in such a de-notification.

5.7.6 Permission to import second-hand capital goods under the EPCG scheme for the electronics sector

To the extent that major firms move to India from another country such as China, the initial equipment in many cases is second-hand one. This helps mitigate the increase in costs that would otherwise occur with production in a new location (India) where the established networks and eco-systems are not yet fully established. Easier conditions for second-hand machinery and equipment would facilitate this process.

5.7.7. Revision of Import of Goods at Concessional Rates (IGCR)

This should be done to facilitate job work, or intercompany transfer.

5.7.8 Clarification of IGCR rules

This would be required for easing the lease of capital goods and their re-export after use, the period of Bank Guarantee (which may exceed the life of machinery), and disposal of machinery at end of its life.

5.7.9 Inadequacy of duty drawback

A duty drawback rate of 4% together with a cap of INR 350 per piece was announced on 28th January,

[177] This is in the direction of (a bit lower than) the thresholds specified for example, by Vietnam.

2020. Hence, mobile phones valued above Rs 8,750 per piece are not eligible for full duty drawback. This is inadequate because the actual duties and the value of exports are more than the upper limit of the value of duty drawback, especially for high value phones which will boost the value of exports.

5.7.10. Credit Guarantee and Interest Subvention Scheme

The domestic industry emphasises this policy support because of the difficulty of access to funds and the costs incurred in a situation where business conditions are uncertain. This is an area where the main competitors such as Vietnam provide similar support for their domestic firms in the mobile phone sector.[178]

5.7.11. Creation of a National Design Eco-system for Mobile Firms

This too is a demand of the larger domestic firms. The objective is to improve domestic capabilities to improve technology and marketability of the product. This provides a good basis to strengthen a process which contributes to sustaining an increase in domestic content over time.

5.7.12 Permission for manual document clearance when ICEGATE is shut down

The industry has experienced that the ICEGATE system does not always work efficiently, with even breakdowns observed at times. It is of the view that an alternative in the form of manual submission of documents should be allowed when ICEGATE is not properly functioning.

5.7.13. Other Issues

The industry has pointed out certain **issues which need to be addressed to improve the operational conditions relating to Special Chemicals, Organisms, Materials, Equipment and Technologies (SCOMET):**

- DGFT takes a very long time to issue licenses for SCOMET products;
- It seeks documents which the exporter is not willing to share (the information is sensitive and privy to decisions between the exporter and regulatory authorities in other countries);
- European countries and other countries (members of the Wassenaar arrangement) have given partial or total relaxation from the requirements of Wassenaar arrangements. Indian exporters may also be given similar exemptions.

5.7.14 Document simplification

Identify the documents which could be further simplified, beginning with an identification of the portion of the overall requirements that could be simplified. Two specific points noted in this context by the exporters are to combine multiple licences into one single license, and to include self-

[178] A demand for credit guarantee and interest subvention has come from large foreign firms as well. In this context, firms are essentially divided into two categories. One, those which take loans for their initial fixed expense, and others which do not take such loans but use their own resources. While the incentive for the former category of firms is clear under credit guarantee and interest subvention scheme, a similar incentive is sought by non-loan taking firms for operational costs, especially on the grounds that they face situations under which operational costs are increased because of delay, legal uncertainty and arbitrary or sudden changes in the scope of the policy.

certification and a single agency for all approvals. Other issues would periodically become evident from focused consultations and feedback from the exporters.

5.8 E-waste Issues and their Solutions[179]

Regulatory requirements on e-waste are more recent. Experience has shown a number of areas where improvements need to be made. The industry has expressed a number of their perspectives in this context. For example:

1. The requirement to seek prior permission of the Central Pollution Control Board (CPCB) under Section 3 (VI) (d) of the Extended Producer Responsibility (EPR) Authorisation before the closure of a certain centre is **impractical and, in several cases, impossible to comply with. This needs modification.**
2. **The penalty imposed should be proportionate to the violation.** There are instances when the penalty far exceeds the nature of the error or lack of conformity with the regulation. For example, in certain cases, a limited violation was punished by stopping all imports of parts and components by the company concerned.
3. **A robust process for conducting audits is needed,** which would include good governance practices such as issuing Show Cause Notices and evaluation of the responses.
4. **Additional resources are needed at CPCB to respond to frequent communications filed by producers** in a timely manner.
5. **Extended Producer Responsibility (EPR) Targets need to be lowered for existing producers.** The revised targets set out under the E-Waste (Management) Amendment Rules 2018 are not practicable or realizable for existing producers. Mobile handsets are difficult to take back because they are sold unbundled and their location is not limited because they can be taken to any place for use.
6. The **extraction of usable parts from old phones and refurbished phones is a significant market in India.** The e-waste standards should keep this aspect in mind.
7. Clarifications should be provided to the **State Pollution Control Boards** (SPCBs) for them to not treat the collection point as a collection centre, and Service centres as refurbishing centres. SPCBs have imposed regulatory requirements on collection points based on an understanding that it functions as a collection centre.

5.9 Phased Manufacturing Programme (PMP): Important Practical Considerations for Effective Implementation

In addition to the problems relating to the implementation of the PMP discussed earlier, there are some larger, policy related issues that need to be taken into account for PMP.

India's domestic content in mobile phones is low, and it relies in a major way on imports of parts and components (see Figure 5.2). The Government has implemented a PMP, as discussed in Section 2.5 above, to increase the domestic content of mobile phones produced domestically.

There are two views on PMP. One is that tariff protection is required to attract investment into the sector. According to this view, domestic content will not increase unless such investment takes

[179] For more detail, see section on "E-waste: Issues and Solutions" in ICEA, "Union Budget Recommendations 2020-2021".

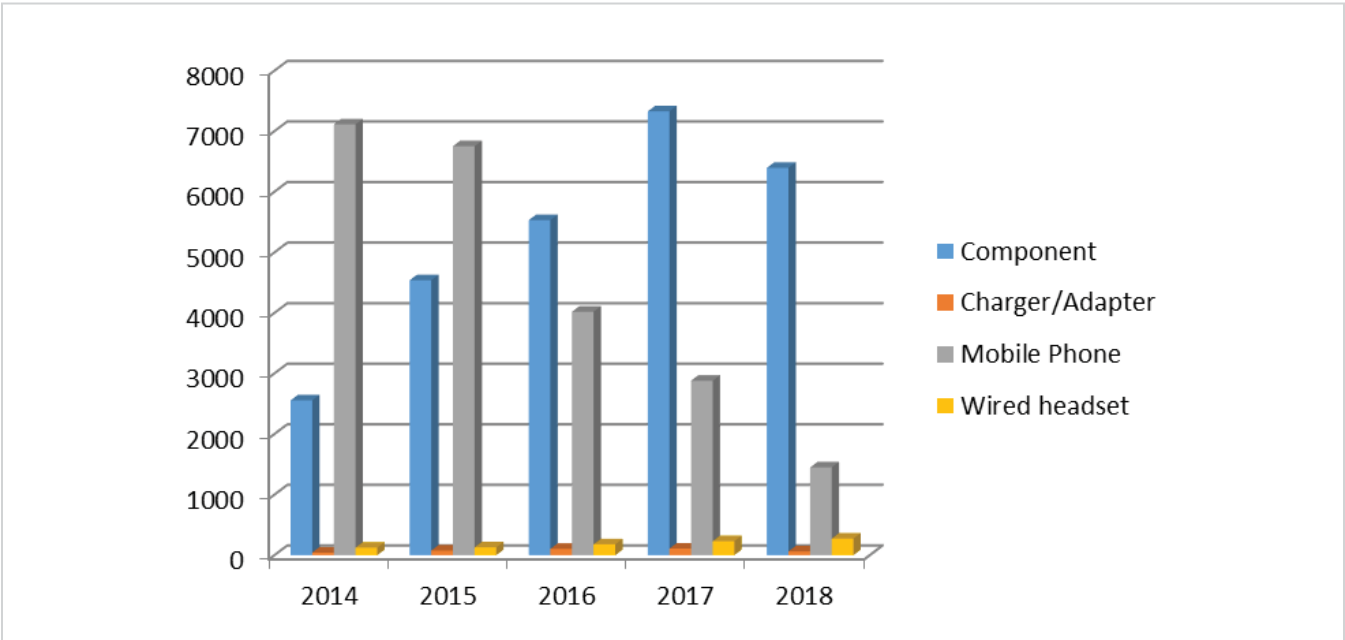
place within India. Another view is that India does not have the requisite skills and capabilities to domestically produce the technically complex products even after getting tariff protection. This is illustrated by Table 5.6 below, which shows that some of the products, particularly the more recent coverage of PMP, are not being successfully produced within India.

Both these views are correct in parts, as shown again by Table 5.6, which provides a list of products which have been successfully made in India. Given this situation, there exists the ability to domestically produce a product in some cases and in other cases the ability is absent. A careful analysis of the details of the PMP is needed in order to make an efficient policy choice. In the context of exports, there is a larger question, i.e. is the PMP on its own a policy which will encourage exports from India?

If a part or component is produced within India with the help of import duty protection, its costs are higher than those in competing countries which produce these products with much lower tariffs (i.e. both China and Vietnam). Exports of these products can take place either based on a subsidy or a cross-subsidization by the producer from higher domestic prices to reduce export prices. The strategy, however, is one of import-substitution and not export orientation of the investment.

The situation becomes more complex if a part or component is not successfully produced within India and its import duty is increased. This raises the cost of production of that product (in certain cases more than if it were produced domestically), making the product less competitive within international markets. Even if the imported product is exported as a part or component of the mobile phone, and thus is subject to a refund of import duty (such as through duty drawback), the procedural requirements involved in importing a tariffed product add to cumbersome operational conditions. Thus, the PMP is primarily an import substitution strategy rather than an export promotion one.

Figure 5.2: Imports of Mobile phones and Components into India (Mn USD)



Source: Comtrade database

Table 5.6: PMP Products and the Success or Lack Thereof to Produce Them in India

BCD Imposed In:	Parts/ Components	Status	BCD Imposed In:	Parts/ Components	Status
2015	APTP	Successful	2017	USB Cable	Not Successful
2015	Gift Box	Successful	2017	Key Pad	Not Successful
2016	Charger/Adapter	Successful	2018	PCBA	Successful
2016	Battery Pack	Successful	2018	Camera Module	Not Successful
2016	Wired Headset	Not Successful	2018	Connectors	Not Successful
2017	Die Cut Parts	Undecided	Deferred	LCD Module Assembly	Not yet implemented
2017	Mechanics	Not Successful	Deferred	Touch Module Assembly	Not yet implemented
2017	Mic and Receiver	Not Successful	Deferred	Vibration Motor/Ringer	Not yet implemented

Source: Page 7 of https://cms.iamai.in/Content/ResearchPapers/a2df7543-cae5-44c3-b1aa-fe1fdb2188d9.pdf

To promote exports to reach the ambitious levels envisaged in NPE 2019, a more focused effort is required with major producers/ exporters. Simultaneously, conditions to incrementally improve the eco-system for the industry in India should be established. India has made significant headway in this regard with the announcement of a support programme on 21st March 2020 (Annex 5.2).

5.9.1 Global Trade Analysis Project (GTAP) simulations of alternative operational conditions

A GTAP analysis was conducted to assess the nature of the impact of tariff increases under PMP. The results (Table 5.7) show that at the aggregate economy-wide level the PMP policy increases domestic production, but negatively impacts exports. In addition, there is a reduction of imports, though somewhat less than the reduction in exports. This shows that the PMP is mainly an import substitution policy, not one which leads to a rise in exports.

Table 5.7: GTAP Results of the Impact of PMP in the Mobile Sector (Figures are in percentages)

Economic Activity Impacted	Percentage Change Due To Tariff Increase Under PMP
Sectoral Employment	0.201
Sectoral Exports	-0.71
Overall (Economy-wide) GDP	-0.0647
Overall (Economy-wide) Exports	-3.1001
Overall (Economy-wide) Imports	-1.9934
Overall (Economy-wide) Employment	-0.1297
Overall (Economy-wide) Investment	-0.4124

Source: GTAP Analysis

An important result of the GTAP analysis is that although domestic production of mobiles increases due to PMP, there is a decline in overall GDP. Similarly, while the sectoral employment increases, the overall employment declines. This is an effect of the higher prices, lower consumption, linkages between the mobile sector and the rest of the economy, and the diversion of production and

investment from more employment intensive activities towards mobile phones due to the higher Basic Customs Duties on them. Therefore, while PMP helps the domestic production of the mobile phone sector, its impact on overall economic activity is negative despite the positive output and employment effect on the mobile phone sector.

Therefore, to the extent that the aspiration is to use PMP as a policy initiative for exports, that effort will not succeed without other support and facilitation policies to improve export performance. This is essential for reaching the aspiration of mobile phone exports reaching USD 110 billion target by 2025. In this regard, the recent policy announced by the Government is a welcome step (Annex 5.2).

5.10 The Need to Monitor Implementation and Address Areas where Progress is Slow

Two distinct points emerge from the discussion above. One, there are a number of concerns that have been recognised and addressed by the Government for some time. However, exporters still find these areas to be a concern. This implies incomplete/poor implementation of solutions.

The second is that even if the Government wants to address new areas of concern, it will again run into the problem of unsatisfactory implementation.

Thus, it is very important for the industry and the Government to interact closely so that the former can communicate its areas of policy concern. Discussions have shown that in practice industry and Government do interact closely, and the Government periodically updates itself on the concerns and areas in need of action for the industry. But the reality is that policy solutions are not adequately implemented. Scrutiny of policy implementation is lacking, as is the prioritisation of key areas to be addressed.

One of the most common concerns of exporters is that the support/ incentive policies are not implemented properly. It is noteworthy that even a Report of a Task Force[180] of 2009-10 emphasises inter alia:

- "Program office under PMO to review and monitor e-governance. Clear directive to centre/ states on implementation. Measurement to be outcome based." (page 17)
- "Transparent and stable policy framework with defined implementation: In the last two years, India is increasingly being perceived as a difficult place to do business. While other competing countries are enhancing incentives and creating a pull for attracting investment, India's changing or different interpretations to tax laws, labour laws, state laws is leading to a push away from India. It is imperative that a harmonious policy structure is created which is implemented uniformly across the country in a defined time-frame." (page 26)

After a decade, the problem of ineffective or ad hoc implementation remains the abiding concern for the sector. In a situation with multiple concerns raised by the sector, it is important to develop a manageable framework which addresses the main constraints to India's exports. This would require

[180] "Report of Task Force to suggest measures to stimulate the growth of IT, ITES and Electronics Hardware manufacturing industry in India".
https://meity.gov.in/writereaddata/files/Suggest%20Measures%20to%20stimulate%20growth%20of%20IT,%20ITES%20and%20Electronics%20Hardware%20Manufacturing%20Industry%20in%20India%20(2009)%20(4961%20KB)(1).pdf

identifying the key priority areas of concern, based on a simple feedback mechanism and a focused purposeful discussion and implementation system.

There is a need to supplement policy formulation and evaluation with a relatively simple framework to keep track of implementation, based on identifying areas of greater priority for the industry/ exporters. To this list could be added those areas which are the low-hanging fruits for policy implementation.

A Management Information System (MIS) is required to:

- collect information on priority areas of action
- collect information on the low hanging fruits for policy, and
- monitor the progress of effective implementation of Government initiatives.

The information collected with the MIS needs to be combined with meetings between the Government and exporters every three months or so, to assess the progress made in addressing the concerns.

In cases where implementation is inadequate or incomplete, reasons must be identified through consultation and specific steps should be taken in a time-bound manner to make policy efforts effective. A record of the progress should be kept for discussion, and a co-ordinating group (similar to or overlapping with the National Committee on Trade Facilitation) should be established to find ways of making progress. Every six months, a report should be provided to a Minister level group chaired by the Prime Minister or a senior Minister designated by the Prime Minister.

The framework of the MIS Report should be simple. One example is the format shown in Table 5.7 below. Based on this format, the Government and industry/ exporters could have discussions every quarter. In addition, the co-ordinating committee could have a website to receive feedback from the implementing agencies on the steps taken to address the issues.

This suggested interaction is different from the focus of the Business Reform Action Plan (BRAP) implemented by the Department for Promotion of Industry and Internal Trade (DPIIT).[181] The feedback for the BRAP programme is very detailed and among other objectives, the feedback is used for developing an index to rank the performance of States.[182]

The feedback process suggested here is much simpler than BRAP. Further, it focuses on specific policies identified based on priorities listed by the industry/ exporters and recorded in terms of the time period for which the problem remains relevant for them. The aim of this exercise is to ensure effective implementation of priority policies, and not just the policies being introduced.

[181] See https://dipp.gov.in/ease-doing-business-reforms

[182] See for example, file:///D:/MY%20DATA/Downloads/2019.02.04%20Implementation%20Guide%202019.pdf and https://dipp.gov.in/sites/default/files/FAQs_to_BRAP_2019_29012019.pdf

Table 5.8: Illustrative Management Information Framework for Increased Policy Focus and Impact

Sector: e.g. Mobile Phones	**Policy Related Concern**	**Ministry/ Department Concerned**	**Date When Issue Was First Highlighted in this Process**
SECTION 1			
1. Top 5 Priority Policy Concerns That Need to be Addressed	1. 2. 3. 4.		
2. Policy Concerns That Could be Addressed Within a Short Period	1. 2. 3. 4.		
SECTION 2		**Action Taken to Address the Concern**	**Comments by Industry/ Exporters in Previous Monitoring Meeting**
1. Top 5 Priority Policy Concerns That Need to be Addressed	1. 2. 3. 4.		
2. Policy Concerns That Could be Addressed Within a Short Period	1. 2. 3. 4.		
SECTION 3 (To Be kept on Record)	**Policy Concerns Raised Earlier That Have Not Been Raised Again by Exporters**		
1. Top 5 Priority Policy Concerns That Need to be Addressed			
2. Policy Concerns That Could be Addressed Within a Short Period			

5.11 Conclusions

The electronics sector is an important part of the economy. Demand for electronics products and their impact on India's socio-economic situation will become pervasive as technological options increase the use of ICT in daily life. Within electronics, the mobile phone sector is the largest segment, and its importance is also recognised by the NPE 2019. This policy document has established a very high target for exports of mobile phones by 2025. An assessment of the situation reveals that this high target is feasible provided an appropriate strategic approach is combined with relevant policies. The approach is to use the large global companies as the engine of the effort.

All the main companies are present within India and need to be encouraged to develop an export

hub within India based on the policies required to improve the operating conditions for exports. A noteworthy development in this context is a major support policy initiative announced by the Government on 21st March 2020, which builds the base for implementing the relevant strategy with global champions.[183] The operational details of this policy and its implementation will require special focus to achieve the objectives of this new initiative.

Against this background, discussions with industry/ exporters have shown that the list of their policy concerns is a long one. It is, therefore, important to distinguish amongst the various concerns in terms of:

- Priority areas of policy concern.
- Policy concerns that could be addressed within a relatively short period.

An important point of note is that the Government has recognised the need to improve policies and has focused on a number of areas for this purpose. However, in general, exporters continue to find these policy areas problematic for want of effective implementation. This needs to be addressed.

This implies a need to monitor implementation, identify the specific reasons behind the lack of progress in implementation, and address the blockage to properly implement the policy. A co-ordinating committee should be established for this purpose, and use a simple format to gather the information required to monitor, identify and address implementation problems.

This Chapter focused primarily on the mobile phone sector, but the issues are relevant also for other electronic products. The discussions with the industry have helped identify priority areas of concern, the low-hanging fruits, and areas where the Government has been working to address concerns but where implementation has been unsatisfactory. The chapter also provides a simple format for the collection of relevant information to improve implementation. This could be used as a basis for internal monitoring and as an aid to coordinate the interaction between Government and industry/ exporters of mobile phones, as well as with exporters of other electronics products.

[183] https://pib.gov.in/PressReleseDetailm.aspx?PRID=1607488

Annex 5.1.

Example of Anti-Export Policy Bias

Intermediaries (outside India), who make arrangement for exports from India and charge for their service.

- The service of the intermediary is not treated as an export because the place of supply rules defines what is export. However, foreign intermediaries are an integral part of the export marketing supply chain.
- The entire IGST has to be paid on the service provided by these intermediaries.
- For IT service, there was earlier a circular which said that these are to be treated as exports (Circular No. 107/26/2019-GST dated 18.07.2019)
- **Instead of treating this as exports for all activities, the IT circular has been with drawn** (Circular No. 127/46/2019-GST dated 04.12.2019)
- Non-refund of IGST on the cost of services of these intermediaries increases costs, and provides a disincentive for export marketing.

Annex 5.2

Key Features of the Support Scheme Announced by the Government of India: For Electronics, Including Mobile Phones, on 21st March 2020

Note: Parts of the statement have been shown in bold to emphasise the point.

1. Under the leadership of Prime Minister Narendra Modi and due to his visionary initiatives like Digital India and Make in India schemes, India has witnessed an unprecedented growth in electronics manufacturing in last five years. Some salient achievements of this growth are as follows:

- Value of electronics produced in India has reached Rs 4,58,006 Crore (USD 70 billion) in 2018-19 from Rs 1,90,366 Crore (USD 29 billion) in 2014-15 at a Compound Annual Growth Rate (CAGR) of about 25%.
- **India's share in global electronics manufacturing has grown almost 2.5 times in 6 years** i.e. from around 1.3% in 2012 to 3.0% in 2018.
- Export of electronic goods have also increased substantially from Rs 41,220 Crore (USD 6.4 billion) in 2017-18 to Rs 61,908 Crore (USD 8.8 billion) in 2018-19.
- In volume terms, India has emerged **as the second largest manufacturer of mobile phones in the world in 2018. Over 260 units are manufacturing cellular mobile phones and parts / components** thereof in the country, up from only 2 units in 2014. The production of mobile phones in the country has gone up 8 times in last 4 years i.e. from around Rs 18,900 Crore (USD 3 billion) in 2014-15 to Rs 1,70,000 Crore (USD 24 billion) in 2018-19 and the domestic demand is almost completely being met out of domestic production.
- As per industry estimates, **electronics manufacturing has generated employment for over 20 lakh persons across the country.**

2. To further realize the potential of electronics manufacturing sector in India, the Government notified the National Policy on Electronics in 2019. This policy sought to provide incentives to the electronics sector for further attracting investments, diversification of electronics manufacturing into sectors like medical, automobile, defense etc., increase domestic value addition and encourage exports. Keeping in view the objective of the Policy, the Union Cabinet on 20th March, 2020 approved three major schemes. Details of these schemes are given in following paragraphs.

3. Production Linked Incentive Scheme (PLI):[184]

- The scheme is proposed to offer a production linked incentive to boost domestic manufacturing and attract large investments in mobile phone manufacturing and specified electronic components, including Assembly, Testing, Marking and Packaging (ATMP) units.
- The scheme shall extend an incentive of 4% to 6% on incremental sales (over base year) of goods manufactured in India and covered under target segments, to eligible companies, for a period of five years subsequent to the base year as defined.
- Government of India has earmarked a budgetary outlay of Rs 40,995 crore for 5 years under this scheme.
- Due to this the domestic value addition for mobile phones is expected to rise to 35%-40% by 2025 from the current level of 20%-25%. Total employment (direct and indirect) potential

[184] The final notification is at https://meity.gov.in/writereaddata/files/production_linked_incentive_scheme.pdf

of the scheme is approximately 8,00,000 jobs.

4. Scheme for Promotion of Manufacturing of Electronics Components and Semiconductors (SPECS)[185]

- The scheme will provide financial incentive of 25% on capital expenditure for the identified list of electronic goods that comprise downstream value chain of electronic products, i.e., electronic components, semiconductor/ display fabrication units, ATMP units, specialized
- sub-assemblies and capital goods for manufacture of aforesaid goods, all of which involve high value added manufacturing.
- The scheme will be applicable to investments in new units and expansion of capacity/ modernization and diversification of existing units.
- The scheme will be open for applications initially for 3 years from the date of its notification. The incentives will be available for investment made within 5 years from the date of acknowledgement of application.
- Government has earmarked a **budget outlay of Rs 3,285 Crore over a period of 8 years.** The scheme is expected to create around **6 Lakh (direct and indirect) jobs.**

5. Electronics Manufacturing Clusters (EMC) 2.0[186]:

- EMC 2.0 scheme envisages to create quality infrastructure (with minimum area of 200 acres) along with industry specific facilities like Common Facility Centers, Ready Built Factory Sheds / Plug and Play facilities etc.
- The scheme will provide financial assistance upto 50% of the project cost subject to ceiling of Rs.70 crore per 100 acres of land for setting up of Electronics Manufacturing Cluster projects.
- For Common Facility Centre (CFC), financial assistance of 75% of the project cost subject to a ceiling of Rs.75 crore will be provided.
- Projects will be implemented in consultation with Anchor Unit(s) / Industry(ies) for encouraging development of supply chain and ecosystem for the electronics industry.
- Government has earmarked a **budgetary outlay of Rs 3,762.25 crore for this scheme over a period of 8 years.** The scheme is expected to create around **10 Lakh (direct and indirect) jobs.**

6. The three schemes together will **enable large scale electronics manufacturing, a domestic supply chain ecosystem of components and state-of-the-art infrastructure and common facilities** for ***large anchor units and their supply chain partners.*** It will contribute significantly to achieving a USD 1 trillion digital economy and a USD 5 trillion GDP by 2025.

- **Production:** The schemes are expected to increase production of mobile phones and components to around **Rs 10,00,000 crore** by 2025.
- **Investments:** The Schemes will **attract new investments** in electronics manufacturing to the tune of at least **Rs 50,000 crore.** The scheme will contribute significantly to direct and indirect tax revenues.
- **Employment:** The combined impact of the proposed Schemes in terms of employment generation will be around **5,00,000 direct jobs and 15,00,000 indirect jobs.**

[185] The final notification is at https://meity.gov.in/writereaddata/files/scheme_for_promotion_of_manufacturing_of_electronic_components_and_semiconductors.pdf

[186] The final notification is at https://meity.gov.in/writereaddata/files/modified_electronics_manufacturing_clusters_scheme.pdf

- Value Addition: Domestic value addition for mobile phones is expected to rise to 35%-40% by 2025 from the current level of 20%-25% due to the impetus provided by the scheme.
- **Disability Compensation:** The schemes, along with other initiatives of the Government and ease of doing business measures, are expected to **have a combined impact of overcoming around 6%-10% of disability in electronics manufacturing** and bring the country on par with other competing nations.

Annex 5.3 Tables

Annex Table 5.1: Indian Mobile Phone Producers' Disabilities Compared to Producers in Vietnam and China

	Cost Reducing Factors	Vietnam	China
1	Corporate income Tax Reduction/Exemption	1.5%	2%
2	Subsidy for Machinery & Equipment	0.2%	3%
3	Cost of Power	1%	1%
4	Interest subvention on Working Capital	1.5% to 2%	3% to 3.5%
5	R&D subsidy	0.4% to 1%	2%
6	Incentive for "Supporting or Domestic Supplier Industry"	0.5% to 1%	0%
7	Exemption/reduction of land rental	0.5%	0.6%
8	Industrial land development support	0.5%	0.6%
9	Building (or plug and play)	0.3%	1%
10	Labour subsidy	0.5%	2%
11	Logistics	0.5%	1%
12	Factors affecting "Ease of doing business"	1.5% to 2.5%	2 to 3%
13	Duty free imports for creating fixed assets, and of inputs not available domestically	0.5%	

Source: IKDHVAJ Advisers LLP, "Replacing MEIS With Smart Support Measures for the Mobile Phone Industry".

Note: (1) The estimates of disabilities show the estimated cost reduction that Indian firms would experience if the relevant policies of Vietnam and China are implemented in India. (2) India has recently implemented a reduction in corporate income tax last year. The impact of that policy for mobile phone producers in India is estimated cost reduction ranging between 0.73% to 0.95%.

Annex Table 5.2: Factors Considered for Estimation of the Index for Ease of Doing Business

Topic and indicator	Topic and indicator
Starting a business Procedures: Number of procedures; Time Taken in days; Cost and minimum capital (% of income per capita);	Protecting minority investors: Extent of disclosure index; Extent of Director liability index; Ease of shareholder suits index; Extent of shareholder rights index; Extent of ownership and control index; Extent of corporate transparency index.
Dealing with construction permits: Procedures; Time; Cost (% of warehouse value); Building quality control index	Paying Taxes: Payments (number per year); Time (hours per year); Total tax and contribution rate (% of profit); Postfiling index (0 to 100); Time to comply with VAT refunds (hours); Time to obtain VAT refunds (hours); Time to comply with corporate tax correction (hours); Time to complete a corporate tax correction (hours).
Getting electricity: Procedures; Time; Cost (% of per capita income); Reliability of supply and transparency of tariffs index.	Trading across borders: Time to export (Documentary compliance (hours); Border compliance (hours)); Cost to import (Documentary compliance (US$); Border compliance (US$)); Time to import (Documentary compliance (hours); Border compliance (hours)); Cost to Export (Documentary compliance (US$); Border compliance (US$))

Registering property: Procedures; Time; Cost (% of property value); quality of land administration index.	Enforcing Contracts: Time (days); Cost (% of claim); Quality of Judicial Process Index (0 to 18).
Getting credit: Strength of legal rights index; Depth of credit information index.	Resolving insolvency: Recovery rate (cents on the dollar); Strength of insolvency framework index (0 to 16)

Source: Pages 79 and 80 of https://openknowledge.worldbank.org/bitstream/handle/10986/32436/9781464814402_Ch06.pdf

CHAPTER

Pharmaceuticals

Introduction

The Indian pharmaceutical industry has been the crown jewel in India's exports basket for a long time. India has acquired global recognition as a source of affordable, accessible, high quality medicines and is the principal supplier of generic medicines to major markets such as the United States and the EU. At the same time, it is at the vanguard of global action against public health challenges such as AIDS, TB, Malaria etc. in developing markets such as Africa, Asia and the rest of the developing world. It supplies 50% of all vaccines to the world and is a significant contributor of medicines to highly regulated markets such as the US, UK and many other developed countries-a tribute to its quality profile, despite challenges at home and abroad. Half of India's domestic production is exported-therefore, it is not surprising that trade policies must play a significant role in the growth of the Pharmaceutical sector.

India accounts for around 10% of the world's production by volume (ranking 3rd worldwide), and around 1.5% by value, placing it 13th in the world.[187] Generic drugs, with 71% of the market share, form the largest segment of the pharmaceutical industry in India. This is set to grow as exports of generics to the US rise, with branded drugs worth USD 55 billion becoming off-patent during 2017-2019. In the domestic market by revenue, Anti-Infectives (13.6%), Cardiac (12.4%) and Gastrointestinals (11.5%) had the biggest market share.[188]

India has 3000 pharma companies functioning through a strong network of over 10,500 manufacturing facilities. The country supplies 60,000 generic brands in 60 therapeutic categories. It is a manufacturer of more than 500 different Active Pharmaceutical Ingredients (APIs). Keeping pace with the globalised world, the Indian pharma industry is also engaged in contract manufacturing, contract research, clinical trials, and contract Research & Development (R&D) activities. India has emerged as a 'global manufacturing and research hub'. The country also exports pharmaceutical products directly to various countries across the globe.[189] In 2018-19, the sector grew at 4.1%, producing medicines worth USD 38.2 billion.

[187] https://www.investindia.gov.in/sector/pharmaceuticals
[188] https://www.investindia.gov.in/sector/pharmaceuticals
[189] Facts from EXIM Bank Study (2016); IBEF (2016).

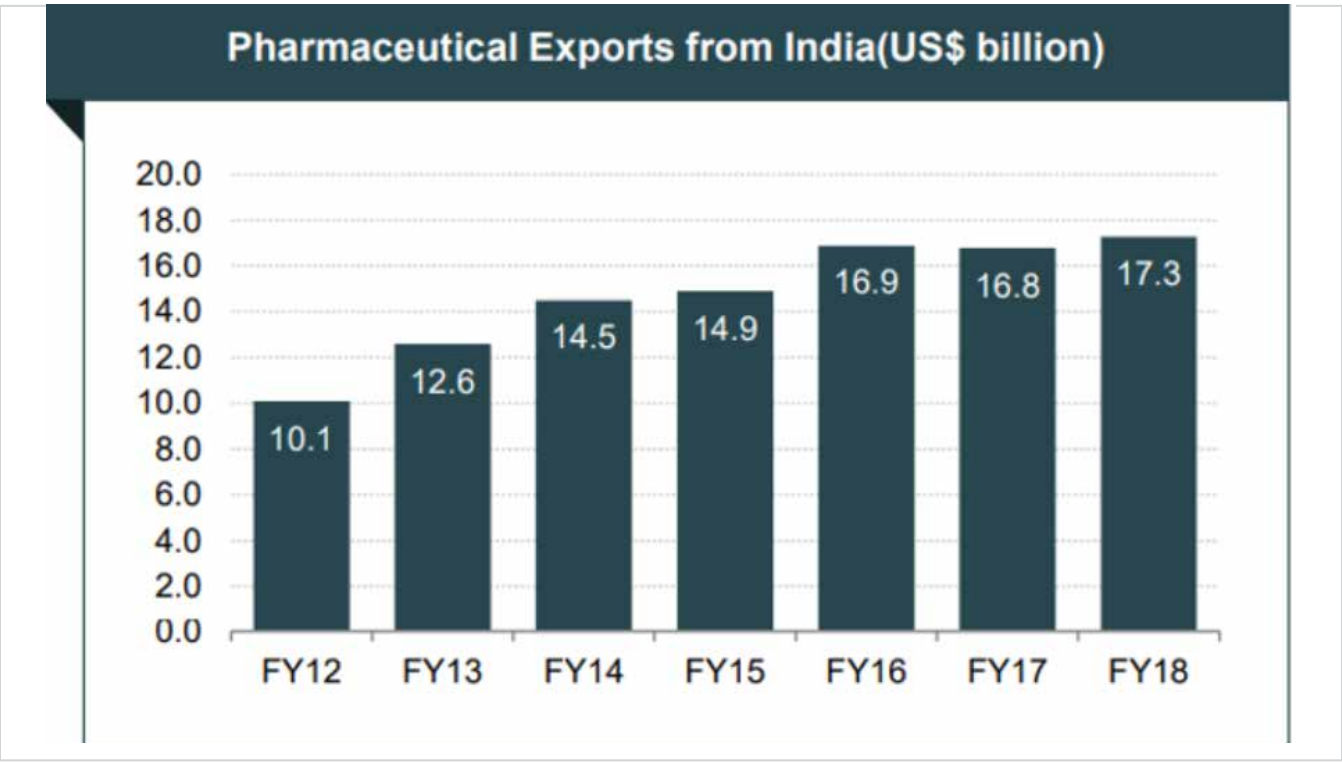
Table 6.1: India's Pharmaceutical Exports (USD Million)

Product Category	2016-17	2017-18	2018-19
Drug formulations & Biologicals	11,987.16	12094.48	13561.53
Bulk Drugs & Drug intermediates	3,383.52	3525.65	3895.14
Vaccines	679.28	653.40	661.93
Surgicals	333.36	552.16	569.77
Herbal Products	278.02	311.74	298.90
AYUSH	123.67	144.38	147.22
Total	**16,785**	**17281**	**19134**

Source: Department of Commerce, Government of India

However, along with its success story, there are certain challenges which hinder the growth of this sector despite its enormous potential. Some issues are as follows: high dependence on China for API, policy implementation and trade facilitation issues, challenges of the bio pharma sector, developing domestic standards and a relatively weak domestic regulatory regime, price-control mechanisms and non-tariff barriers faced in export markets. Of late, it has been questioned whether the industry can maintain its position in the rapidly changing global economic and technological scenario. Thus, along with celebrating the success story of the Indian pharmaceutical industry, it is of equal importance to examine these issues and outline a pathway for the future so that the industry not only remains a frontline supplier of medicines, but grows in newer, challenging areas of technology and product development.

Figure 6.1: Pharmaceutical Export from India (USD billion)



Source IBEF

This paper discusses the challenges as well as the domestic policy suggestions essential for the development of this sector. However, before doing so, Section 6.1 discusses how this major industry in India reached its high success based on a number of policy initiatives and a focus on science-based education and institutions. The proliferation of domestic producers functioning with low margins, a large and growing domestic market, and the Government's emphasis on developing domestic capacity for certain key pharmaceutical products, led to a structure of the Indian industry somewhat different from that in developed economies. The Government of India has formulated several policies for this sector but their implementation has been a handicap. Section 6.2 discusses in summary the implementation challenges faced by the industry. A lot of emphasis in this chapter has been given to APIs as it is a strategic area for the development of the pharmaceutical industry. Section 6.3 analyses the challenges in this area. Section 6.4 discusses the challenges in the new and emerging area of biologicals in India. Section 6.5 discusses the other challenges for this sector. In addition to the new emerging product areas, the Indian pharmaceutical industry has a rich tradition in its areas of traditional medicine. A short point in this regard is made in Section 6.6. Section 6.7-6.10 develops policy recommendations which include amendments or tweaking of existing domestic policies to meet the challenges outlined earlier. The chapter concludes with a brief summary of the main findings. Annexes 1 and 2 provide detailed comments by The Bulk Drug Manufacturers Association (BDMA), which show the various concerns of the pharmaceutical industry regarding unduly burdensome conditions created by environment regulations.

6.1 The Emergence of the Pharmaceutical industry in India

The Indian pharmaceutical industry stands tall today by virtue of the intersection of three major streams of domestic and global developments, i.e., a conscious domestic policy and legal support framework by the Governments at the Centre and in some states, an enthusiastic domestic entrepreneurial class ready to discover and execute opportunities at home and abroad, and global developments. The latter created a demand pull in the advanced markets, with global inter-governmental and non-Governmental institutions resolving to address global health challenges head on and recognizing Indian entrepreneurial capacities capable of meeting those challenges. The following are some of the major policies and initiatives that have transformed the Indian pharmaceutical sector.

6.1.1 Emphasis on public sector investment

In the Nehruvian years, the Government took active steps to develop local production capacities by establishing public sector units (PSUs) for the production of API of both varieties-synthetic and antibiotics and Finished Pharmaceutical Products (FPPs) to overcome import dependence. During this time, basic technologies for manufacturing drugs and the requisite plants and machinery were imported from the then Soviet Union. The Government had established Hindustan Antibiotics Ltd, a fermentation plant for manufacturing antibiotics in Pune in 1954 and Indian Drugs and Pharmaceuticals Ltd (IDPL), a synthetic pharmaceutical chemical plant for producing APIs in Hyderabad in 1961.[190] Most first-generation entrepreneurs evolved from these public sector companies and the regulatory system around them.

[190] Producing more than 10 basic APIs. These included folic acid, vitamin B, methyldopa and others

6.1.2 Mandatory API production

Further, from the early 1970s to the 1990s, the Government of India followed a distinct policy: it made it mandatory for the domestic private companies and MNCs formulating the drugs to manufacture API. It stipulated different levels for fully domestic firms, partially owned foreign firms, fully owned foreign firms and MNCs. Prior to implementation of this policy, foreign firms and MNCs imported all APIs to produce FPPs. This policy however ensured the continuance of production of APIs and the maintenance of domestic production capacities hitherto created in the phase when Indian businesses were transitioning towards privatisation and there was a wave of MNCs across the globe. As a matter of fact, a strong base in basic science education such as chemistry, and the establishment of institutions such as the National Chemical Laboratory served to promote a science based entrepreneurial spirit in India.

6.1.3 Process Patenting rather than Product Patenting

The Patent Policy adopted by India in the early phase of its independent existence was driven by the vision of self-sufficiency, the commitment to meet the health requirements of a large poor population suffering from health issues typical to developing societies, and the urge to attain commanding heights by the relevant public sector companies in their respective fields. Therefore, a strong knowledge base in process chemistry came in handy for production chemists, who adopted reverse engineering to produce medicines through routes not protected by an existing patent. The Patent Act of 1970 was a boon, as it recognised process patenting and not product patenting. Thus, the Indian pharmaceutical sector showed tremendous growth in production capacities, which was harnessed once the economy opened up following the 1991 market reforms. India signed the Trade Related Intellectual Property Rights Agreement (TRIPS) under the umbrella of the WTO in 1995, adopting Product Patent standards which became effective in 2005. Strong capacities emerged in chemistry based key starting materials (KSM) and their follow ups-the APIs. Further, new technologies for the production of vaccines and fermentation products were developed. Several decades ago, all of India's requirement of penicillin G (Pen-G) was produced within the country. The Indian pharma industry got its recognition as the cheapest producer of APIs and formulations from them.

6.1.4 Global recognition and healthcare outcomes

The Indian pharmaceutical industry has developed world-class capabilities in the development of formulations and built the entrepreneurial ability and vision to establish India's foot in international markets such as the United States. India is considered to have made some key contributions to global health outcomes.[191] Patients in the developing world have relied on India's export of low-priced generic medicines, including generic versions of drugs subject to patents in high-income countries. Thus, the WHO recognizes the process patenting by India instead of product patenting was a 'global public good'.[192]

[191] https://ipacon2019.com/
[192] https://apps.who.int/iris/rest/bitstreams/1140139/retrieve

Box 1: India's contribution to global and domestic Public Health

Contributions to Global and Domestic Health

Global Health Outcomes

- 60 percent of global vaccine production is accounted for by India.
- India's contributes to nearly 40 percent to 70 percent of the WHO demand for Dightheria, Tetanus and Pertussis (DPT) and Bacillus Calmette-Guerin (BCG) vaccines.
- India contrivutes to 90 percent of the WHO demand for the measles vaccine.
- Approximately 25 percent of the medicines used in UK are made in India.
- In Africa, the availability of affordable Indian drugs contributed togreater access to treatment for AIDS, with 37 percent of AIDS patients receiving treatment in 2009 compared to just two percent in 2003

Domestic Health Outcomes

- An Increase of 50 percent in drug penetration in India has been witnessed over the period of 1990-2016
- A drop of 36 percent between 1990 and 2016 in the Disability Adjusted Life Years (DALYs) measuring the per capita disease burden after adjusting for changes in the age structure of the population has been achieved, Particulary, Disease burden on account of infectious and associated diseases reduced from 61 percent in 1990 to 33 percent in 2016.
- By 2016, India had become Polio-free country which could achieved with sincere and strong efforts and collaboration among the vaccine manufacturers, healthcare providers, the goverment and the development organisations and various NGOs.
- The treatment costs of life-treatening diseases such as Choronic Myeloid Leukaemia and Hepatitis C has reduced to less than five percent of the original cost.

6.1.5 Structure and market strategy of the Indian pharma industry

The credit for the huge success of the Indian pharma goes to its basic structure, which was very different from the structure and marketing strategy of MNCs. The latter operated on high profit margins and a small section of consumers.

Lower profit margins

The MNCs selling in India charged very high prices, as they produced FPPs in India by importing APIs, requiring them to bear the importing cost. Apart from the importing cost, the margins on cost were also kept very high. Indian agents who facilitated imports for MNCs observed this high margin and started formulating their own FPPs and sold them at lower margins.[193]

Large domestic market

India has had a large (and growing) population since independence, which created an expanding domestic market for medicines and other segments of the pharmaceutical industry.[194] The large Indian population even in the 1950s-60s gave space to the then local manufacturers to develop economies of scale and create sufficient production capacities before entering international markets.

Taking advantage of the cost competitiveness enabled by the large Indian population and the additional price competitiveness enabled by lower profit margins, the initial entrants in the Indian

[193] Ghosh (2019)
[194] Abbott (2017b)

pharmaceutical markets, especially 'branded generics', developed good quality products and earned goodwill for their brand name domestically.

6.2 Methodology

In order to better appreciate the contemporary challenges faced by the pharma industry, this section draws from published literature and a string of Government and industry reports, besides consultations held with sector experts and their communications with Government Departments and agencies. Further, in order to validate and update the information received, interviews were held with senior representatives of the sector, producer and exporter organisations, company representatives, sector experts and some past and present officials in various Departments of the Government of India. Three questionnaires designed for Government officials, industry representatives and one specifically designed for industry representatives seeking their views on export hubs were circulated and responses were collected. Information in the following paragraphs includes that derived from contemporary reliable literature and the responses to the questionnaires. The three main sources used are:

1. The Department of Commerce Task Force report of 2008.[195]
2. The Katoch Committee Report of 2014.[196]
3. The High Level Advisory Group report of 2019.[197]

In 2008, the Department of Commerce set up a task force coordinated by one of the authors of this report. The task force was mandated to examine the international trade environment for pharma exports from India. It dwelt deep into the sector policies, recognising that exports were only the front end of a long policy value chain. All experts and many industry representatives conveyed that most of the issues identified by the task force remained as relevant now as they were then. In fact, they have now acquired critical dimensions because trade buoyancy has significantly reduced, competition has increased, and the domestic sector policy environment has not improved significantly.

The Department of Commerce had also constituted a group comprising representatives from the department, the Exim Bank and a sector expert to look into the technology and investment aspects of the sector in 2012. This group had given elaborate recommendations on the special capex needs of the sector particularly focusing on the research and development dimensions and the need for innovation in the sector to address the long gestation required for drug development and its commercialisation. In 2014, the then DG, ICMR headed a committee (Katoch Committee) which comprised, among others, Secretaries in the Departments of Commerce and Pharmaceuticals, specifically addressing the serious situation of an almost total migration of the fermentation industry from India to China and a major shift of the KSM and API industry to China. India remained largely a formulation manufacturer having already lost its grip on APIs and KSMs. As recently as in late 2019, the High Level Advisory Group constituted by the Commerce and Industry Minister also recommended that pharmaceutical and medical devices sector should be developed.

[195] Web-link is:
https://commerce.gov.in/writereaddata/uploadedfile/MOC_635567633057176521_Report%20Tas%20Force%20Pharma%2012th%20Dec%2008.pdf
[196] https://pharmaceuticals.gov.in/sites/default/files/Katoch%20Committe%20Report.pdf
[197] https://commerce.gov.in/writereaddata/uploadedfile/MOC_637084607407371826_HLAG%20Report%20.pdf

The opening of the economy in 1991 brought global markets to India's doorstep. It also brought the challenges of competition and problems associated with small scale production to a sector which was increasingly becoming more regulated globally and therefore demanded greater compliance at higher costs. Other problems included the pace at which technology was and is evolving both in terms of the introduction of new products and innovations in the manufacturing process and the use and application of medicines, the constant need for high investments of financial and human resource capital to stay ahead of the competition, and the marketing challenges in far off destinations nuanced by the peculiar distribution architecture of the pharma markets globally. Competition had come from quarters which were nowhere near India three decades ago but through their long term vision and planned sector development and concurrent neglect in India, pose serious challenges to India.

These challenges have now acquired serious strategic and security threats and need to be addressed urgently. Regulatory challenges in the destination markets have been rising -the regulations are better informed by science and domestic interests. In several countries, regulatory systems are influenced by established interests of the large multinationals from advanced countries leading to the default application of regulations prevalent in advanced markets to even developing and least developed markets. As several significant markets become potential destinations for Indian pharma, non-tariff barriers to discourage market access are being created. Besides these specific sector concerns, entrepreneurs in India, despite serious constructive efforts in the recent past, continue to be afflicted with challenges which include issues related to policy implementation and the ease of doing business.

Most other sectors in their export performance inter alia are impacted by domestic trade facilitation and other policy implementation issues, but the pharma sector is unique: besides these measures, many of the obstacles can be located in the sector specific policies, and therefore need a more specific treatment. Further, being a knowledge industry, a constant upgradation of skills, human resource endowment, investments in research and development, and innovation and new institutional mechanisms to bring synergies are required. The next three sections attempt to discuss these challenges in two parts viz. those which can be broadly classified as implementation issues (though they may appear insignificant, they affect the small producer the most and need short term solutions) and substantive issues belonging to the realm of sector policies seriously impacting the sector's global potential. The latter challenges occur at several levels, many of which have now acquired serious proportions and grown to become national security issues. These challenges have been further classified into two parts. The first part deals with APIs, while the second deals with Biologicals. The other challenges which relate to new policies are dealt with in section 6.6. Sections 6.8-6.11 deal with policy solutions in the same order that the challenges have been addressed.

6.3 Implementation Challenges

These issues abound in the literature, and some of them have required reforms for a long time. They can be broadly grouped as follows:

6.3.1 Regulatory issues

The Indian pharmaceutical industry suffers from regulatory control at the hands of multiple authorities,

along with frequent changes made to these regulations. Excessive regulatory control and frequent changes in the regulations often results in making the businesses environment cost-unfriendly and unpredictable, which acts as a disincentive for the investors.

The Central Drugs Standard Control Organisation (CDSCO) prescribes standards and measures for ensuring the safety, efficacy and quality of drugs, cosmetics, diagnostics and devices in the country. It also regulates the market authorization of new drugs and clinical trials standards and supervises drug imports and approves licences to manufacture the products. The National Pharmaceutical Pricing Authority (NPPA), which was instituted in 1997 under the Department of Chemicals and Petrochemicals, maintains data on production, exports and imports and the market share of pharmaceutical firms and enforces and monitors the availability of medicines in addition to imparting inputs to Parliament on issues pertaining to drug pricing. The Department of Chemicals and Petrochemicals (DCP) also oversees policy, planning, development and regulatory activities pertaining to the chemicals, petrochemicals and pharmaceutical sector. The process for drug approval entails the coordination of different departments, in addition to the Drugs Controller General of India (DCGI), depending on whether the application in question is for a biological drug or one based on recombinant DNA technology. Issues related to industrial policy such as the regulation of patents, drug exports and Government support to the industry are governed by the Department of Industrial Policy and Promotion and the Directorate General of Foreign Trade, both under the aegis of the Ministry of Commerce and Industry. With respect to licencing and quality control issues, market authorization is regulated by the Central Drug Controller, the Ministry of Health and Family Welfare, Department of Biotechnology, the Ministry of Science and Technology (DST) and the Department of Environment, Ministry of Environment and Forests. State drug controllers have the authority to issue licences for the manufacture of approved drugs and monitor quality control, along with the Central Drug Standards Control Organization (CDSCO). The multiplicity of agencies can lead to confusion and regulatory incoherence. Ensuring coordination among the different regulatory authorities is imperative for a robust regulatory mechanism.[198]

6.3.2 Export incentives

The exporter representatives, as for many other sectors, maintained that export incentives such as Merchandise Exports from India Scheme (MEIS), Market Access Initiatives (MAI), Export Promotion of Capital Goods (EPCG), Trade Infrastructure for exports (TIES) and the Brand Pharma Campaign must continue. The Government of India has already decided to discontinue the export linked incentives in line with the Agreement on Subsidies and Countervailing Measures and the challenge it has lost in the WTO. But in a low margin export scenario, a loss of 3% to 5% by way of export incentive needs to be filled up.

6.3.3 Delay in export-import norms

Under the Advance Authorisation Scheme, the fixation of Standard Input Output Norms (SION) takes longer than 6 months. It was reported that composition of the SION committee takes much longer. The industry representatives voiced uniform concern on this issue. This leads to variations in cost

[198] https://shodhganga.inflibnet.ac.in/bitstream/10603/114212/6/chapter-5.pdf

calculation of the product and the consequent calculation of value added.[199] Interviewees suggested that norms proposed by the applicant should be accepted if the SION norm is not fixed within 6 months. Further, it was submitted that pre-import condition should be waived off with effect from implementation of IGST exemption on advance authorization, i.e. from 13th October 2017 instead from the date of notification i.e. 10th January 2019.

6.3.4 Environmental clearances

Industry representatives reported that an environmental clearance to establish a new unit or expand an existing one takes 2-3 years. Presently any product change or capacity and equipment upgradation requires a fresh environmental clearance or a lengthy "change of product mix" application even if the pollution load for the changed product mix may not have changed. Further, specifically in the case of bio-pharmaceuticals, their production typically generates easily biodegradable aqueous effluents.[200] The most painful experience comes from differing interpretations given to central regulations by the state pollution control boards. While representatives of the Central Government and Central Pollution Control Board are ready to help, but rarely succeed as there is no standing mechanism to meet at short intervals to deal with such aberrations. This is the most critical obstacle in the way of creating extra capacities or bringing in nimbleness in production schedules, which is essential for international supply chains. Some changes facilitating clearances were recently notified, but their implementation will have to be closely observed.

Recognising the criticality of the lack of domestic production of APIs, a faster track environmental clearance for API units was advocated.

Units discharging effluents in excess of 25 KLD are asked to have their own effluent Treatment Plants instead of discharging in the Central Affluent Treatment Plant (CETP). This defeats the basic purpose of the common facilities and puts an extra burden on the unit. The industry also requested a review of the blanket ban on additional environment clearances in industrial areas like Ankaleshwar and Vapi.

6.3.5 Goods and Services Tax (GST) issues

Following issues were raised,

- GST refunds to be streamlined/ to be provided on regular basis.
- Procedure of ITC (input tax credit) refund to be automated from the current manual system.
- For exports under advance authorization where Integrated GST (IGST) exemption is availed, the exporter has to compulsorily provide a letter of undertaking (LUT) without payment of tax. This condition should be waived off as exporter can opt for LUT or IGST paid option (GST rule 96(1).
- Delay in obtaining NOCs from Central Bureau of Narcotics, for export of Psychotropic Substances.

6.3.6 Trade related infrastructure issues

Insufficient energy infrastructure and inadequate transport infrastructure has historically posed

[199] Stakeholder Views – Line Ministries, Regulatory Agencies, and Industry Associations
[200] ibid

challenges for companies operating in India. Hence, several committees have frequently suggested that mega API complexes or clusters have to be organised by state, with common infrastructure funded by the state or the Centre and collected on a pay per use basis (as implemented by China). As the amenities are shared, the cost per company significantly reduces and their viability increases.

6.3.7 Credit crunch

The current banking practice- a three-year term loan funding, no funding for research, and inadequate funding for working capital are unsuitable for this industry. Longer term loan funding (like any developed economy) for manufacturing, R&D funding through innovative mechanisms and practical working capital funding are required. In a banking environment which is going through existential transformation, such measures are available though rarely implemented.

6.3.8 Lack of systematic clinical trials

Though there has been regulatory development, there are hardly any cases coming for clinical trials, thereby drying up a potential source of revenue for India. It was reported that the new regulatory framework has not been adequately marketed, and global companies which can bring their trials to India hesitate to do so, recognising the uncertainties and unpredictability of the past. The companies producing biologicals are subject to the whims of Subject Expert Committees (SECs) set up by the CDSCO and the Drug Controller General of India (DCGI). Their review of clinical trial protocol and clinical trial data is generally in a viva-voce style, which poses a big risk for the companies developing new drugs, biologicals and bio-similars. These SEC meetings suffer from uncertain schedules and conflicts of interest among the medical members, non-transparent agenda formations and last-minute changes. Once the marketing approval is obtained from the SEC, the company again has to go to the SEC for the pack insert for approval.

6.3.9 Concerns of producers catering to domestic market

Indian pharma manufacturing is segmented in two halves-those catering only to the domestic markets and those who also export. The units that cater to foreign markets are largely governed by the US Food and Drug Administration (FDA) norms[201] along with different country specific norms which are subsequently discussed in the following sections on Non-Tariff Barriers (NTBs). The small and medium enterprises in the pharmaceutical industry in India express the concern that their products do not meet US FDA norms even though they can be safely consumed and have proven efficacy along with being cost-competitive. These concerns hold validity in cases where the US FDA norms have been seen going overboard at times. Besides, the diverse capacities of different states add to the challenge of having norms which assure quality, safety and efficacy while addressing the diverse capacity concerns. The Indian scenario has been compared with the European Union model, where different countries in the Union have different capacities and are subject to the same standards.[202] Thus, it becomes important for India to develop and implement its own standards to address the concerns of all sections of the industry across different Indian states. Setting high Indian standards

[201] Abbot, 2017b
[202] Ibid.

comparable to international standards also ensures the quality of pharmaceutical products being imported into India, especially when India has lately come to rely on imports for most of the bulk drugs and intermediaries (including major APIs).

6.4 Challenges Relating to APIs

6.4.1 Declining domestic production and high dependence on imports of API

The domestic pharma industry heavily depends on imports of bulk drugs, or active pharmaceutical ingredients (APIs), and intermediates that give medicines their therapeutic value. India imported around ₹249 billion worth of bulk drugs in 2019 that accounted for about 40% of the overall domestic consumption. This is an increase of around 30% from 2018. Imports from China have been on a steady rise over the years due to the low-cost advantage enjoyed by Chinese manufacturers. In 2019, India imported ₹174 billion worth of APIs from China and exported merely ₹16 billion worth of the ingredients. With India's API imports from China averaging almost 70% of its consumption by value, importers fear supply disruptions and unexpected price movements. Dependency on Chinese APIs is nearly 100% for many critical antibiotics.[203]

The latest statistics from the Directorate General of Commercial Intelligence and Statistics tabled in the Parliament reveal that in 2016-17, of the total import of USD 2,738.46 million (₹19,653.25 crore), China constituted 66.69% (USD 1,826.34 million or ₹13,107 crore) of all bulk drugs and drug intermediates. In 2017-18, India imported USD 2,993.25 million or ₹ 21, 481 crore worth bulk drugs and intermediates, and the share of China in the pie, increased to 68.36% (USD 2,055.94 million or ₹ 14,755 crore). Chinese imports levelled at 67.56% (USD 2,405.42 million or ₹ 17, 263 crore) in 2018-19, still the largest share in total Indian imports worth USD 3,560.35 million or ₹25, 552 crore. Overall, India's dependence on imports has gone up by 23% from 2016-17 to 2018-19.[204] The heavy dependence of India on China for the supply of APIs presents one of the biggest challenges for the Indian pharma industry. The Coronavirus pandemic has accentuated the need for a determinative action in this respect.

6.4.2 Reasons for low domestic production of API

- The biggest impediment that Indian drug manufacturers face is **low capacity utilisation**. While the drug manufacturing sector in India has an average utilisation rate of 75% and above, API production facilities have a much lower rate. Most of the API production units in India run at 30-40% of their capacity. [205]
- The production of many APIs involves the use of **fermentation technology** which requires land, water, high quality power supply, good effluent discharge etc. The Indian pharma industry has seen the shutdown of many units that used fermentation technology for the production of antibiotics over the years.[206] The high cost of land and power (attributed to skewed policy

[203] https://www.livemint.com/science/health/coronavirus-cii-asks-pharma-sector-to-consider-making-bulk-drugs-in-in-dia-11582101851383.html

[204] https://www.thehindubusinessline.com/companies/indias-dependence-on-chinese-imports-for-api-maximum-over-last-three-years/article30051154.ece

[205] https://www.tpci.in/blogs/the-api-paradox-of-indias-pharmaceutical-industry/

[206] In the current scenario, India has become 100 percent reliant on China for fermentation-base APIs including ciprofloxacin erythromycin, penicillin, paracetamol or etc. (Abbott, 2017b).

resistance to change in the power pricing framework given the huge transmission losses arising from impractical distribution policies for agriculture) have contributed to the fermentation industry shifting from India to China.

- The current **bank** lending instruments generally have a project gestation of just 3 years, typically designed for non-pharma industry. Pharma projects have a long gestation (5 to 8 years) period between the concept and its commercialisation and involve very large investments. While in principle availability of such lending windows may exist, their utilisation is limited. There is also a near absence of funding for research and innovation, an inadequate tax structure to incentivise research, development and innovation in the pharma sector, and inadequate funding for working capital. The generic pharma makers have catered their products on low margins and regulatory compliance liabilities have consistently increased. As aging populations rise, national budgets are under pressure to squeeze all value from a product. Hence, price pressures are consistently growing. The sector is also unique in its organisational structure. The number of entities occupying the space is the largest anywhere in the world, and their sizes range from a garage operation to a state-of-the-art production facility. Thus, most companies do not have investment surplus on their balance sheets and have to depend on commercial borrowings.

6.4.3 Economic, developmental and strategic concerns over this issue

This dependence presents a major challenge for the pharma industry for a variety of reasons, ranging from economic to developmental and strategic:

- Supply of APIs from China can stand interrupted for any unforeseen reason. There can be no better illustration than the present Coronavirus pandemic, which threatens to impact global supplies of APIs.[207] An important earlier instance in this regard is the **discontinuance of the supply of raw materials** including APIs from China during the Summer Olympics of 2008.[208] A country like India, which has a large population, should be well prepared to deal with **'public-health emergencies'** which might call for the availability of large stocks of antibiotics on a short notice. The inability to procure large volumes of medicines or dependence on a foreign supplier can develop into a 'national health crisis' (ibid.).
- APIs have been an important source of **generation of export revenue** for India since the 1970s. The shift from the local production of APIs to importing it from China implies a dent on the export revenue (HLAG recommendations) and inflation of the import bill for the country.
- Shut down of API producing units and a cut on API production also creates an uncertain environment for **maintenance of a technological base** in the pharmaceutical industry in the country. The absence of such a technological base can create a lack of employment opportunities in the field of basic chemistry in the short run and a lack of interest in youth in the long run. This could have negative repercussions for the technical capacities of the Indian pharma industry.[209] In the geo-political turbulence enveloping the world over the last few years, policy makers have expressed the need to deal with the challenge in a strategic manner, instead of as a simple supply chain issue. As in the electronics sector, China exercises immense leverage over India's healthcare system. This situation is further aggravated by the Chinese bid to acquire Indian know-how on

[207] https://economictimes.indiatimes.com/industry/healthcare/biotech/pharmaceuticals/how-long-will-indias-drug-stock-hold-out-in-case-of-a-coronavirus-breakout/articleshow/74471765.cms
[208] Abbott, 2017b, Indian policies to promote local production of pharmaceutical products and protect public health, WHO.
[209] ibid

formulations chemistry. As stated, India earlier enjoyed great advantages in the sector because of strong moorings in process chemistry. Because of policy aberrations and the short-term approach adopted by producers, India lost the API sector to China and now even the formulation sector is under threat in many different ways-the acquisition of Indian formulation companies by large Chinese companies, and winning over of Indian experts by Chinese companies to migrate to China. It was reported that there were instances of Indian process and R&D chemists employed by Indian companies taking a sabbatical from their work to help Chinese companies acquire know-how in formulation chemistry. While this anecdotal evidence cannot be confirmed, the stakes are so high that they deserve investigations and strong policy measures both at corporate and national Government levels. The DOC committee and the Katoch committee gave their recommendations in 2008 and 2015 respectively, but only very recently did the Government come out with a scheme to promote API clusters, unfortunately betraying a lack of realisation of the criticality of the issue. It was reported that nominal resources were being allocated for the scheme-which may not be enough to initiate the program.

6.5 Challenges Related to the Emerging Sector of Biologicals

There is a significant trend in the global pharmaceutical industry towards production and R&D of biotechnology-based drugs, or 'biologicals'. Biologicals are produced using a different technology from that used for small molecule synthetic chemical drugs. Small molecule drugs are produced starting from chemicals that usually (but not always) are common to the petrochemical industry, involve significant issues of environmental control (including waste), and large energy requirements. Biological drugs are produced in reactors where biological materials replicate under strictly controlled conditions. The process of producing biologicals is more complex and costly than producing small molecule drugs, but does not require the same level of external infrastructure support in terms of chemicals and electricity. In this regard, the incentive support requirements for the biotech industry are different from the incentive support requirements for the small molecule industry.[210]

The major issues with respect to this challenge of transitioning from chemical based to biological drugs can be broadly classified as follows:

6.5.1 Regulatory issues

- In India, the regulatory authority and rules for the approval of biological drugs and/ or bio-similars have taken a long time to evolve. The regulatory guidelines were introduced in 2015, followed by further improvements in 2018. They are still understandably evolutionary in nature. **Multiple agencies control** the bio-pharma industry in India;
- Further complications exist in the form of **clinical trials,** which form an essential step in bio-pharma production. These trials are under the purview of the Ministry of Health and Family Welfare. Further, these need to be reviewed by a review committee and the licenses for manufacturing have to be obtained from the State Governments. Hence, coordination between the different regulatory authorities is needed to ensure a robust regulatory mechanism.[211]

[210] Abbott (2017b), Indian policies to promote local production of pharmaceutical products and protect public health, WHO.
[211] BIRAC (2016), 'Make in India for BIOTECH -the way forward', BIRAC. Brand India Pharma Campaign retrieved from https://www.brandindiapharma.in/ Consolidated FDI Policy (Effective from 1 April 2014) (2014), Department of Industrial Policy and Promotion, Government of India.

- While clinical trials are considered as standards for safety and efficacy of new drugs and vaccines, clinical research in India suffered a downturn in the years 2013 and 2014 due to the regulatory uncertainty.[212]

6.5.2 Intellectual Property Rights

Regulation of patents also presents a concern for the Indian bio-pharma industry. Major factors that assume significance in determining the success of bio-pharma (especially biosimilars) in India (or in general) "include the ability to gain first-mover advantage within a given indication, the subsequent horizontal expansion across disease stages and indications, and the creation of high barriers to competition through the accumulation of clinical safety and efficacy data".[213]

Until recently, only forty patent protected biological drugs were being marketed in India. **Delays are encountered in processing of patents** in the bio-pharma sector. To overcome the issue, 130 examiners were already recruited and an additional 350 were supposed to be recruited, along with the patent litigation to be addressed by the commercial courts as per the BIRAC Make in India (MII) for BIOTECH 2016 Report. The report suggested that the patent offices were to closely function with the National Institute of Pharmaceutical Education and Research (NIPER) with the aim of increasing pharma patents from India. However, the challenge still persists-the issues are novel, and implementation of their solutions is still lacking.

6.5.3 R&D-complex production process

Production of biologicals and/ or biosimilars is fraught with R&D challenges at all stages of production-the product development phase and the clinical development phase. The product development requires large scale clinical programs that have established safety and efficacy. The production process has to be highly controlled, as even minute variations in the production/ clinical environment can lead to major and unacceptable changes in the quality of the drug being produced. Also, the equipment used for production matters. The production of a biological and making it available to be used as a medical drug requires a number of expensive clinical trials and studies over a sample of volunteer patients. Other challenges in the clinical development phase include study indication, study design, reference product, regulatory approvals, patient recruitment, statistical consideration, immunogenicity, safety assessment and post marketing study requirements. Thus, a great deal of R&D is required to ensure quality and controls across the entire manufacturing process including the raw materials used, the equipment used and the clinical environment for enabling the production.[214]

6.5.4 Investment requirements

Biologicals require big investments with long gestation periods-along with the intensive research and development capabilities. Expenses include funding and facilitating R&D, raw materials, equipment and the creation of a clinically controlled environment for the production of biologicals or

[212] BIRAC (2016), ibid.
[213] Abbott (2017b), Indian policies to promote local production of pharmaceutical products and protect public health, WHO.
[214] Dixit (2017), Narvat (2018)

biosimilars. Further clinical trials and studies of the efficacy and impact of the drug on over hundreds of volunteering patients is quite expensive. Lately, a few newspaper articles on the subject have quoted an estimate of USD 150 million on bringing biosimilars to the Indian market.[215]

6.5.5 Competition from China in Biologicals

China is presenting a strong competition to India in the global biological market. According to Frost & Sullivan, China's biological drugs market expanded from USD 9.13 billion in 2012 to USD 22.13 billion in 2016, an annual growth rate of 25%.[216] China was ranked as the world's fastest-growing biologicals market. Contrary to this, the Indian market for biologicals was valued at USD 0.92 billion in 2016 (HLAG Recommendations). It has also been reported that the newness of the production process of biologicals acts as a barrier to the new companies exploring this market space. Four Indian pharma companies that have hitherto explored the market space in biologicals include Aurobindo, Cipla, Dr Reddy's Laboratories and Lupin.[217] This is despite the aforementioned fact that the first bio-similar in India was approved almost 20 years ago in the year 2000. The continued novelty of this production process can be attributed to the huge amount of investment and the gestation period in realising the returns on that huge investment.

6.6 Other challenges to the pharma industry

6.6.1 Price controls

Another key issue is the presence of price controls on essential drugs. When these price controls were initially established, they were based on a "cost plus" formula. Private sector companies uniformly indicate that cost plus formulas are anathema to improvements in efficiency and quality control, because any savings from improvements achieved are incorporated in the cost plus calculation, reducing the fixed price of the medicine.[218] The objective of the producer is to increase its margin by lowering its costs while maintaining or increasing prices (i.e. increasing the spread). With a cost plus formula there is no incentive to improve. According to some private sector manufacturers, there is a financial disincentive to investing in improvements. Over the past several years, the Government has responded to the concerns of the private sector by moving away from a cost-plus formula, to a reference-price formula based on the average of companies having at least 1% market share, and precludes retailers from charging over that reference price within a retail price margin.[219] Some private sector companies have also indicated that it would be preferable from the Government standpoint to focus on competitive bidding for supplies of product as a means to control costs.[220] The current drug price control policy has had many unintended consequences. For example, many pharmaceutical

[215] Ibid

[216] Frost and Sullivan (2018)

[217] Ibid

[218] According to Dilip Shah: India had cost-based price control. Only in 2013 was it changed. If a company improved its API production process to reduce costs, the cost price formula would simply be passed through and lower the price of the end product. The manufacturer could not retain anything. This was a disincentive to improving processes and lowering cost.

[219] Drugs (Prices Control) Order, 2013, Department of Pharmaceuticals (To be published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section(ii) dated 15th May 2013). Calculation methodology can be found in the Prices Control Order 2013, and are discussed more generally under Frequently Asked Questions (FAQs) on the National Pharmaceutical Pricing Authority web site, http://nppaindia.nic.in/. Also, email from Dilip Shah, Sept. 10, 2016.

[220] Abbott, 2017 b

companies have opted to go out of production because their profit margins decreased.

This presents a challenge not only for attracting private investments but also for attracting foreign investments in the pharmaceutical sector[221] which keeps India from harnessing the benefits of increased FDI in the pharma industry, including the potential technology transfer it could bring along. However, the dilemma is to ensure affordable medicines to the Indian masses, the majority of which are still poor or are from the low-income segment. At the same time the Government needs to enhance the production capabilities of Indian pharma by attracting domestic and foreign investment in the sector. Attracting more players in the industry is also imperative to keep market-distorting monopolistic powers in check.[222]

6.6.2 Non-Tariff Barriers (NTBs)

Like in many other product areas, several countries have brought down their tariffs but increasingly built non-tariff walls around products of their interest to restrict market access to such products. In the case of pharmaceuticals, it is even more pronounced because they are highly regulated products. In order to ensure safety and efficacy and quality as well as affordability to the general public, countries resort to imposing various Sanitary and Phytosanitary Measures (SPS) and Technical Barriers to Trade (TBT) on the imports of pharma products.

These regulations include price controls, national health protection and insurance schemes, drug registration market authorization, quality control, restrictive domestic procurement policies, quality standards, imports & distribution, packaging & labelling, intellectual property and even mergers and acquisitions in some countries. Some of the measures are as follows;[223]

6.6.2.i Multiple approvals by various drug regulatory authorities in export markets

Different countries have different drug approval agencies like USFDA, Medicines and Healthcare products Regulatory Agency (MHRA) UK, the European Medicines Agency (EMEA), European Directorate for Quality Medicines (EDQM), Ministry of Health, Labor, and Welfare (MHLW), Japan, The World Health Organization (WHO), Therapeutics Goods Administration (TGA), Australia, and MCC, South Africa among others. This raises the cost of drug registration and site inspections. There are Mutual Recognition Agreements (MRAs) in place between countries like UK, USA, Canada and Japan which recognise the inspections and approvals already obtained and accept equivalent Good Manufacturing Practices (GMPs). However, conclusion of any such significant MRAs for India is yet to be seen.

6.6.2.ii Expensive and cumbersome drug registration in foreign markets

The documentation required to register drugs in various countries is extremely lengthy, cumbersome and expensive. They also involve a stringent review of documentation such as the Drug Master Files (DMFs) and Abbreviated New Drug Applications (ANDAs) dossiers. These documentations, at times,

[221] Ibid
[222] Ibid.
[223] Taskforce Report 2008.

ask for very intricate details about the production process, site design and human capital which any private company or even a country might not be willing to divulge. Additionally, the drug registration and approval fees charged in the European Union countries, Russia, Japan, South Africa etc. is exorbitant. Countries in the European Union charge exorbitant fees for granting drug registration and approvals. Most regulatory documentation is in the local language.

6.6.2.iii Bioequivalence studies

Certain countries such as Japan, Mexico and Thailand demand studying bioequivalence i.e. comparison of the drug levels to the 'original drug in-vivo', on their respective local populations. While various countries including USA, Canada, South Africa, Australia and European countries accept bioequivalence studies conducted in India as per international guidelines, other countries do not. Besides, conducting bioequivalence studies is very costly. Such a technical barrier to trade has the potential to hamper Indian exports.

6.6.2.iv Reference standards

Countries have often insisted on innovator standards of their own. For instance, if one wants to export generic paracetamol to Brazil, then the exporter has to obtain the reference standard for paracetamol of the innovator registered in Brazil only.

6.6.2.v Requirement for local presence or Joint Ventures

Some countries like Japan insist on having a tie-up with a local manufacturer/ distributor in the form of a local establishment or a local partner for the registration of drugs and clinical trials for bio-equivalence studies.

6.6.2 vi Counterfeit & spurious drugs

Definitions of counterfeit drugs & spurious drugs vary across countries. Consequently, Indian exports have faced seizure in regulated markets, especially the European Union, where even the generic versions of innovator drugs have been regarded as counterfeit and/ or spurious. Exporters have also been levied with punitive damages in this regard.

6.6.2.vii Other NTBs

Other issues include a lack of information or difficulty in obtaining information about standards being followed in the export markets (for example, in African countries), Government procurement policies of certain countries like USA, and country specific non-tariff barriers that apply to a category of industries and thus affect pharmaceuticals like the European REACH.

6.7 Ayush medicines and services

India has a strong grounding in traditional medicine discipline. The stream has its roots in ancient recorded and practiced knowledge. Therapeutic products which are recorded in the historic sources

are classified as classical products. Over the years, newer combinations have been produced which may not have records in the old texts but have proved effective and are used in the countries where the tradition is followed. These are called proprietary products. The second category of products generally go under the name of dietary or nutritional supplements. The Ayush discipline itself requires to be established as a globally acceptable science in order for these products to be recognized as medicines. This is a long and tortuous pathway. Yet there are a significant number of countries which follow traditional medicine in their public health systems. China has, in a very systematic way, pursued its interest and succeeded to some extent in getting recognition for its traditional medicine. India is very actively engaged in building its own pathway for global recognition.

6.8 Recommendations and Proposed Policies for Implementation Challenges

The previous section discussed major obstacles in the path of the Indian pharmaceutical sector achieving its true potential. In the digital era, a new generation of the sector, viz. Pharma 4 is emerging. India is uniquely positioned as an early leader both in the pharmaceutical industry as well as the Information Technology Industry. India must play a unique role in ushering in the Pharma 4. The new paradigm would require:

- Technology including Digital and Biotechnology & Superiority in Chemistry (Investment in R&D).
- Quality and scale.
- Economies - lowest total cost of manufacture/ resilience to pricing pressure.
- Regulatory knowledge and its compliance.
- Environmental compliance.
- Market knowledge.
- Legal prowess – deep understanding of IP and the ability to spot lucrative opportunities.

6.8.1 Regulatory and procedural issues

An action agenda around each of these elements needs to be constructed to take India back to the pivotal position in the sector. In the following paragraphs, the response to the challenges documented earlier is outlined by suggesting some action points. In 2014, an ambitious Make in India Program was taken up with the objective of bringing manufacturing back to India. From an all-inclusive approach, the Government has rightfully adopted a selective approach by picking up those sectors for intervention which show promise for India. The action program to remove some of the constraints will contain some short term and some medium term measures. Some key measures are suggested below.

6.8.1.i Short-term measures

Status of the regulator

By their very nature, pharmaceutical products must correspond with the best standards globally available. A regulator represents the perspective of the country on the product or service it regulates. India has been a major global supplier of generic medicines and is so recognized by all major importing countries. India has come to be recognized as the 'Pharmacy of the World'. It is imperative that the status of the regulator should be equivalent to the highest position in the Government i.e.

the Secretary to the Government of India. The post should enjoy autonomy-both functional and administrative.

Distribution of work between Central and State regulators

The multiplicity of licensing agencies at the State and Central levels allows unscrupulous entrepreneurs to game the system. In order to maintain uniformity in principles and practice of licensing it should be consolidated in the Central agency. Similarly, the Central agency should have overriding powers for enforcement subject to some qualifications to avoid the fall out of political economy in a large diverse country. For efficient functioning of the pharmaceutical industry, it is imperative that the regulatory control is streamlined through measures such as fixing the timelines for processing applications by the CDSCO and FDA (State Agencies), and comprehensive amendments rather than multiple and parallel amendments done in the case of drugs and cosmetics (D&C) Rules.

Expansion of technical capacities

A few years ago, the Central regulator was able to expand its manpower resources, but still falls short by global standards and its requirements. Further, this is a continuously expanding area as far as scope for scientific capacities is concerned. Better equipped regulators have much to offer by way of state-of-the-art knowledge and regulatory practices, hence a standing mechanism negotiated with leading regulators such as the USFDA, on capacity development and exchange of experts is required. Further, in view of the shortage of inspection manpower and the need for upgradation of skills, it makes immense sense to laterally complement technical capacities with outside experts from the open market, private sector, academia and research bodies and retired experts of foreign regulatory agencies. This will also help bring some competition and fresh air into an inbred organization. India sources its inputs from many places, particularly China. It is necessary that India position its drug inspectors in such locations so that proper quality control is ensured over the inputs.

Upgradation of Schedule M of the Drugs and Cosmetics Act

Pharmaceutical products are made to local standards. When they have to be exported, either the importing country standards or WHO standards are followed. The upgradation of Schedule 'M' of the Drugs and Cosmetics Act, 1940 to WHO standards is therefore a functional requirement for strengthening of local industry and facilitating its transition to high quality standards prevailing in major markets of the world.

Interaction with foreign drug regulators

India should, on a regular basis, invite officials from foreign regulators to expose them to India's regulatory framework and practices. Such opportunities can also be used to take them through the manufacturing facilities of major producers in a more informal but professionally conducted manner. This will bring mutual benefits.

Uniform CoPP format (recommended by WHO) throughout the country

Certificate of the Pharmaceutical Product (CoPP) is the preliminary document to be submitted for

obtaining product approval/ market authorisation and to export the pharmaceuticals to most of the overseas markets. The industry is facing difficulties while exporting because of the lack of uniformity in the CoPP format issued by various State Licensing Authorities. The MoH&FW should take up this issue to implement a uniform format, recommended by WHO, by all the State licensing authorities throughout the country.

Simplify approval procedures for clinical trial import/ export materials

Established/ accredited Clinical Research Organizations (CROs) should be permitted to take a one-time clearance for import/ export of clinical trial materials if the parties to the contract are the same, eliminating the need for repeated clearances from various agencies. Based on risk profiling, approval from a single agency could be considered, as time is crucial in obtaining and executing contracts. Self-approval facility may be given for established corporates based on some risk profiling and audits. There is a need to increase the ease of conducting medical trials and subsequently launching drugs locally.

At present, many companies conduct their clinical trials in India but do not launch the drug locally. Steps must be taken to ensure that companies testing drugs locally are also required to launch them locally, to ensure that Indians benefit from the drug development.

Adoption of Trace and Track Mechanism

Indian Pharmaceuticals have suffered challenges on account of malicious campaigns against their quality. Through a conscious policy after a long process of consultation and accommodation, a Trace and Track mechanism was mandated several years ago. Vested interests were able to delay the implementation. This mechanism was not merely important for exports-the Health Ministry had adopted a somewhat similar system for domestic traceability. The system needs to be re-enforced to establish quality consciousness about Indian medicines.

Simplification of approval procedures for drug and clinical trial

There should be simplification of approval procedures for drug and clinical trials while ensuring compliance and minimizing any evasion. It is important to ensure scheduled and transparent SEC meetings and streamlining of the marketing approval and pack insert form in one meeting. A Standard Operating Procedure (SOP) must be developed and implemented to ensure smooth, consistent and effective functioning of SECs across the pharmaceutical industry in India.

Time bound redressal

Such measures may include putting in place effective grievance redressal for exporters by reducing the time to redress the issues (current time 3-4 days), or putting a self-declaration mechanism in place which allows export consignments to leave the port at the earliest.

Simplification of procedures

The Government must ensure that the format, content and interpretation of all approvals for purposes

such as land use, access to power and potable water, pollution control etc. for the establishment of a pharma company is common throughout the Central and the State Governments.

A single window system for securing all clearances and approvals

Approvals from Central and State agencies including CDSO/ MPPA/ Pollution Control Board and and others must be established to facilitate manufacturers of pharmaceuticals and technology upgradation.

6.8.1.ii Medium-term measures

Strengthening of lab infrastructure

While technical personnel capacities have received attention to some extent, laboratory and equipment capacities have been completely ignored. State-of-the-art facilities for testing and corresponding infrastructure is essential to build global scale regulatory capacities. Hence, a time bound program for strengthening of lab infrastructure is required.

Pharmaco-vigilance

Post Marketing Surveillance has received little attention in India. Frequent complaints on quality standards and enforcement are heard that cast doubt on the credibility of the system, particularly from competitor market operators. Even in the domestic market, a consumer aggrieved on quality of a medicine has nowhere to go. He should actually be able to lodge and pursue complaints against unfair practices and poor-quality medicinal products. Hence, an elaborate pharmaco-vigilance framework needs to be institutionalized. This will instill confidence in the quality of medicines emanating from India.

Indian Pharmacopia (IP)

Indian Pharmacopia is not recognised by any country except Afghanistan. It was reported by a former drug regulator that the Indian Pharmacopia has been strengthened to almost the best global levels. Because IP is not recognised by major buying countries, our manufacturers have to make products to importing pharmacopeial standards. Once our Pharmacopia is elevated to the best standards, equivalence or mutual recognition agreements could be signed with other regulatory agencies facilitating market access. India must therefore strive for recognition of its Pharmacopia. This could be tagged to Indian investments and technology sharing arrangements in the sector in such markets.

Membership of Pharmaceutical Inspection Convention (PIC) and Pharmaceutical Inspection Co-operation Scheme (PIC/S)

PIC/S is a global platform that is designated to elevate and support National Regulatory Authorities (NRAs) in strengthening their regulatory and inspection standards by promoting global networks of regulatory authorities to develop mutual confidence, exchanging information and practical experience, mutually training inspectors and harmonizing GMP standards. It is imperative for the

domestic sector to reform many areas in the regulatory framework before the convention can be joined. India must set a target date for joining the convention.

Participation in international fora

Indian regulatory officials must on a regular basis participate in multilateral/ international regulatory fora like the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) / International Conference of Drug Regulatory Authorities (ICDRA). It would help improve awareness amongst the member countries about the regulatory practices and framework followed in India to maintain the quality of medicines produced in India. This would also enhance the acceptability of Indian drugs and dispel the myths about quality concerns.

6.8.2 Flexibility in environmental regulations

The environmental clearance regulations should be revised to allow flexibility in terms of changes in product mix, especially when those products use the same process flows and generate the same amount of effluents. The change of bulk drug production made within the same general category should be freely allowed without a fresh environmental clearance or any application for the "change of product mix". To ensure compliance with environmental standards, the discharge samples may be tested at any time. It was reported that getting an environment clearance takes more than 12 months at a significant cost and even a simple change of product mix takes 3 to 6 months even though the effluent load is within approved limits. In such cases, at best, a unit could be asked to file a self-declaration of no increase in pollution load. Whenever there is an increase in the quantities produced or new machinery is added irrespective of whether pollution load is increased or decreased, industry has to go for EC. The pollution enforcement agencies should be concerned with the overall load of pollutants rather than machinery or product mix involved in the production process. The present arrangement does not allow efficiency improvements or process innovations in its consideration. It is unfair to expect an industry located in a cluster serviced by a CETP to be asked to put up its own ETP. The basic purpose of locating the factory in such an area is lost, but instances were quoted during our consultation when such demands were raised. Appropriate amendments to the Environmental Impact Regulations are necessary to respond to these concerns. Section 25 of the Water Act requires consent for establishment and consent for operations. But when the unit is a zero liquid discharge unit, such a permission is unwarranted.

6.8.3 NOCs for narcotics

There is often a delay in obtaining NOCs from Central Bureau of Narcotics, for export of Psychotropic Substances. The DOC Task force (2008) had examined the potential of exports if these regulatory barriers were to be removed and had suggested ways of streamlining the procedures. Therefore, immediate measures are necessary to adopt those recommendations.

6.8.4 Facilitating advance authorisation

Priority setting up of the SION committee is an imperative in today's fast-moving trade. Unfortunately, the DGFT takes a long time to set up these committees. Very often, delays in fixation of SION or ad

hoc norms beyond six months are faced. The industry is therefore justified in asking for closure within six months or acceptance of norms proposed by the industry.

6.9 Policies to mitigate API challenges

With an objective of formulating a long-term policy for incentivising and promoting domestic manufacture of bulk drugs and APIs, a high-level committee, the Katoch Committee, was formed in 2013. It submitted its report in 2015 with a view to reinvigorate India's strength in APIs and formulation manufacturing. The report recommended Cluster based Manufacturing (Katoch Committee Report, 2015).

The report identified that a holistic focus to revive or upgrade the entire pharma industry can go a long way in reviving the API segment, and focusing only on the API segment in solitude might not be a long-term solution. It was identified that manufacturing of bulk drugs and APIs requires sufficient availability of land, water, electricity, steam, effluent treatment, testing facilities, pollution control and management etc. (Katoch Committee Report, 2015). The valuable recommendation of the committee for economizing the production of APIs and other bulk drugs and making investments in API industry profitable are being pushed for implementation and being appreciated by the private sector also.

6.9.1 Katoch Committee recommendations long-term policy recommendations

The recommendations of the Committee included:

1. Establishment of Large Manufacturing Zones (LMZs)/ Mega Parks for APIs with common facilities maintained by separate Special Purpose Vehicles (SPV);
2. Providing such facilities at concessional rates initially to enable India's cost competitiveness in international markets;
3. Creating mega parks with common facilities like Effluent Treatment Plants (ETPs), testing facilities, Captive Power Plants/ assured power supply by state systems, Common Utilities/ Services such as storage, testing laboratories, IPR management, designing, guest house/ accommodation, etc.;
4. Attaching these zones with power plants and solvent yards;
5. These zones could be set up in Petroleum, Chemicals and Petrochemical Investment Regions (PCPIRs) in states that have the requisite facilities/ systems in place;
6. Setting up of proper technology for treatment of pollution, proper rules and regulations to keep check on the pollution level along with the quality of output;
7. Development of efficient and effective procedures of implementation, including alignment of the provisions of the Acts and rules regarding pollution, quality control, customs and excise duty. Export bodies such as Directorate of Foreign Trade (DGFT), coal allocating bodies, and electricity authorities should have a cell in the mega complexes proposed for the bulk drugs.

The establishment of six such clusters – fermentation, fluorination facilitating hub, continuous flow synthesis led hub, green hubs for peptides/ monoclonal antibodies/ biologics, and two general hubs for API/ intermediates in five to six states of India would be sufficient for propelling the Indian pharma industry, especially the API sector. Land allocation of 800 to 1500 acres of usable area (apart from green belt and common areas), preferably with energy, water, effluent treatment systems, conventional fire safety systems, community infrastructure for training/ advanced testing/ libraries/

market intelligence data/ incubation centres was expected to produce the desired results.

6.9.2 Assistance to Bulk Drug Industry for Common Facility Centre

Given the high amount of investment and coordination among different infrastructure resources, a public-private partnership and cooperation from State Government were suggested by the committee (DoP Document 2015). A sub-scheme called **Assistance to Bulk Drug Industry for Common Facility Centre** under the Department of Pharmaceutical's 'Scheme for Development of Pharmaceuticals Industry' was announced, but remained a non-starter because of several constraints including low budgetary investments which betrayed half-hearted planning. The scheme consists of five sub schemes viz. Assistance to Bulk Drug Industry for Common Facility Centre, Assistance to Medical Device Industry for Common Facility Centre, Assistance for Cluster Development, Pharmaceuticals Technology Upgradation Assistance Scheme (PTUAS) and Pharmaceutical Promotion Development Scheme (PPDS).

6.9.3 Countering the disabilities vis-a-vis China

Any attempt at reviving the API industry needs to be seen with reference to the disabilities manufacturers in India would face compared to those in China. The API manufacturing industry is capital intensive and presently considered to be a non-viable business in view of China's strength. It is estimated that Indian manufacturing of APIs is at a disadvantage of 10% to 30% with respect to manufacturing in China. The cost of production in China is an estimated 20-30% lesser than in India in fermentation based products and 10-15% in chemical synthesis based products. China scores on several points viz. huge capacities giving scale advantage, low interest rates of around 4-6% in comparison to around 8.5-11% in India, Power cost of Rs 4-6/-/KWH in China to Rs 7/-/KWH in India, cost of Steam at Rs 1800/ Ton in China to Rs 5000/ Ton in India, a distinct technology advantage in China in comparison to India, and ETP treatment cost of Rs 102/KL in China as compared to Rs 1920/ KL in India. To cap all of these advantages, Chinese industry is very well backward integrated i.e. KSM to Intermediate to API, whereas India only has a partial integration in some areas. The tax advantage in China was marginally higher but the recent revision in corporate tax rates have created a greater advantage for manufacturing in India on this count. China has a very well evolved research ecosystem closely linking academia, research institutions and the industry. Despite several recommendations, India is yet to establish an institutional mechanism with appropriate incentives and frameworks involving intellectual property rights, etc. Finally, Chinese exporters gain greater incentives for exports relative to their Indian counterparts. What, therefore, attracts investors to India? The evolving global trade environment first accentuated by the US-China conflicts and now hugely aggravated by the corona pandemic, and the recent experience faced by almost all major manufacturers on the issue of bulk drug supply chain break downs are two major economic factors. Many sector specific factors such as India's capacity in process chemistry and its historic advantage in API manufacturing can still be harnessed given the right incentives.

Ironically, it needed a dreadful virus pandemic to galvanize the establishment to bring out a scheme on which work had started as early as 2008 and more concretely since 2013, when the Katoch Committee was set up. On 23rd March the Government announced two schemes viz. a) Promotion of Bulk Drug Parks (Rs 3000 Cr.) and b) Production linked incentive scheme for KSMs/ Drug Intermediates and APIs (Rs 6940 Crore).

The contours of the scheme are as follows:

(a) Development of 3 bulk drug parks

- GOI has earmarked Rs 3,000 crore for the development of 3 bulk drug parks in the next 5 years in partnership with the states where these will be located;
- Minimum area of 1,000 acres of land cover;
- Maximum of Rs 1,000 crore will be given as grant-in-aid to the state;
- Aid would be for common facilities such as solvent recovery plant, distillation plant, power & steam units, effluent treatment plant etc. for manufacturers;
- States looking to attract manufacturers should arrange for low-cost land and crucial utilities, such as water and electricity, at cheap rates.

(b) Production-Linked Incentive (PLI) scheme

- Rs 6,940 crore will be allocated over the next 8 years under the PLI scheme.
- Financial incentive will be given to eligible manufacturers of 53 critical bulk drugs, KSMs/ APIs & drug intermediaries on incremental sales for a period of 6 years.
- Out of identified 53 critical bulk drugs, 26 are fermentation-based and 27 are chemical-based
- Fermentation-based bulk drugs will get a 20 % incentive for the first 4 years, 15% for the 5th year & 5% for the 6th year.
- Chemical synthesis-based bulk drugs will get a 10% incentive for a 6-year period.

6.9.4 Amending Drug Price Control

Given that the scheme looks at a base year of FY20 for incentives on the basis of incremental sales, it would likely attract big pharma players. However, the Government must rationalize its overzealous price-capping policy; the scope of the Drug Pricing Control Order has been increasing over time, despite India having one of the cheapest drug prices in the world. This has forced drug makers to cut costs and favour cheap Chinese API over locally made ones. Interestingly, the Government's 2017 draft pharmaceutical policy seemed to acknowledge this when it said, "the Drug Price (Display & Control) Order 1966 put 18 APIs (raw materials) under price control...(and) from 1996... imported APIs and intermediates started becoming hugely lucrative as a price cap on drugs forced the manufacturers to obtain the cheapest raw material with the basic minimum efficacy/ quality".

The draft policy never spoke of the drugs themselves but, over time, suppliers prefer to produce more of the drugs that are not under price control. Yet, after discussing the adverse impact of price controls on the API industry, the draft policy batted for them. It is this thinking that the Government will have to give up if it wants API production in the country to take off again. As long as pharma margins keep getting pushed down by price-capping, drug-makers will keep looking for cheaper imports. Pharma price-capping flies in the face of reason-the latest Economic Survey points out that the prices of drugs that came under DPCO 2013 increased, on an average, by Rs 71 per mg of the API versus Rs 13 per API-mg for drugs that remained outside the order, making it clear that price controls don't really help. So, while the API-package is indeed a timely intervention, the Government still must swallow the bitter pill of shrinking the ambit of the DPCO and the National List of Essential Medicines.

The expected outcomes of the umbrella package include drug security through self-sufficiency in manufacturing of 53 critical bulk drugs, the assured availability of various essential drugs listed under

NLEM at affordable prices and a cumulative reduction in imports by around Rs 46,400 crore in the next eight years.

Moreover, at the end of five years, import substitution of specified drugs per annum will be Rs 8,500 crore, against current imports of Rs 19,000 crore. The schemes will also create 7,000 direct and 14,000 indirect jobs.

6.9.5 Promoting backward integration

There is no doubt that the scheme has come at the most opportune time, but the results will be visible only after a couple of years. One of the objectives of the scheme should be a complete backward integration. Therefore, incentive should not be given to an API producer without making KSM, which could hinder the achievement of the objective. If a product is in the list of top 300 imported APIs or top 300 imported formulations, and if the applicant wants to produce in addition to the approved list product, he should be encouraged. The proposed incentive in the production linked scheme is on incremental sales. This can be misleading, as a year on year increment will mean that it is applicable only for annual growth, which is not the intent of the scheme. Hence, the increment should be on the base year.

6.9.6 Promoting effective pharma clusters

The Government should facilitate or promote the scheme with banks and stress the need for national drug security. The mindset and flexibility offered by banks in supporting potential investors will mean a lot for the success of the scheme. Similarly, the role of the relevant states is critical in setting up the industrial parks. While the guidelines are prepared, time should be of essence. India's experience with implementation of budget schemes has at best been tardy. Therefore, an umbrella committee under the chairmanship of the Principal Secretary to the Prime Minister should be put in place. This committee should include relevant states which choose to set up industrial parks and Secretaries of the central Departments such as Financial Services, Economic Affairs, MOEF, Commerce, Industry, Health and Pharmaceuticals. The schemes should be designated priority schemes driven by national security objectives and considerations such as margin money etc. should be practical and rational. The Government must carry out aggressive advocacy with states rather than waiting for them to propose on their own. It makes tremendous sense to select states which have locational, capacity and historic sectoral advantage. Since export orientation is an intrinsic part of the process and environmental factors are important, coastal location and proximity to pharma clusters is important. As the schemes get on track, it makes a lot of sense to streamline some of the environment clearance-related irritants discussed earlier and carry out time bound reforms in that space. An effective implementation of both schemes is of critical importance. As the scheme implementation advances, an appropriate trade remedy and tariff plan will have to be built around the schemes to support its outcomes over time.

6.10 Policies to address challenges in biologicals

6.10.1 Promoting the biopharma sector through contract manufacturing-short term

The Department of Biotechnology (DBT) has envisioned creating a biotech industry that will be worth

USD 150 billion by 2025. Biopharma is expected to drive over USD 750 million through the bio-manufacturing of drugs, vaccines, diagnostics and therapies. A business intelligence study forecasts an opening up of new opportunities in biological drugs due to patent expiry by 2023 and beyond. Indian companies need to make their presence felt in this fast-emerging space.

The outsourcing of biopharmaceuticals manufacturing is becoming increasingly attractive, driven by the lack of captive manufacturing capacity with international mid and small biotechnology companies that drive the research and development pipeline. Another new value differentiator is in digital technologies that are tied to the demonstration of outcomes and aid in medication adherence and monitoring - e.g. through digital biomarkers. India must be at the forefront of these innovations. The business model of contract manufacturing organisations (CMOs) is rapidly evolving to suit the changing demands of biopharmaceutical innovation, with over 50% of biopharmaceutical companies outsourcing some form of their biopharmaceutical production. CMOs have also adapted well to the change by offering value-added services such as packaging, logistics and anti-counterfeiting in addition to traditional manufacturing, making outsourcing an increasingly attractive option. This would harness the strengths of the biotech and IT capability in India to acquire a front running position globally in this emerging area.

6.10.2 National action plan for biologicals - medium-term actions

This area is a relatively new starter, but has tremendous promise for the future. Random and sporadic action will not help the sector achieve a global position. It is recommended that a National Action Plan for Biopharmaceuticals for the next ten years be adopted. Since this will require resources and cooperation at a global scale, it is advisable to prepare the National Plan and execute it in a mission mode. Some of the elements of the action plan can be seen in the following non-exhaustive list:

- An extension of the tax holiday for the biomanufacturing sector is required, as India needs to locate itself firmly in a high technology area to avoid similar consequences as in the API sector ten years later;
- The sector has been asking for the continuation of export linked incentives. Recognising that the Government has not been supportive of these incentives in view of the pending WTO litigation, the new API scheme will help biologicals as well since the coverage of the scheme includes two lists of basic and niche fermentation products and comments made there will also be relevant in this case
- The SEZ scheme has proved of immense value to biopharmaceuticals. The Baba Kalyani committee on SEZs has recommended delinking of SEZs with export obligations, and with the new production linked incentive scheme coming under implementation, the SEZ infrastructure needs to be specifically looked into. The TIES scheme under the Department of Commerce has little allocation and the specific circumstances of the biomanufacturing sector call for a dedicated funding to strengthen special infrastructure in SEZs where biomanufacturing is to be promoted. Biological manufacturing units are complex and capital intensive. They require expensive research and clinical testing to ensure their safety profile. Since most biologicals are injectibles, all processes need to be performed under sterile conditions. The three pillars of biopharmaceutical edifice are fiscal incentives, regulatory freedom and world class infrastructure. Because of the long gestation for biological products, the time from setting up to market entry is upwards of 5 years. The fiscal instruments providing incentives should internalize this reality. Any tax holiday ignoring this fact

will only provide half benefits to the target units. The tax holiday should begin only when the site is registered by a major regulatory body such as USFDA. In China, a tax holiday begins only when the site starts generating peak revenue. In Malaysia, the tax holiday starts even after the unit starts generating profits. Thus, the fiscal environment is far more attractive in these jurisdictions.

- Companies are investing more and coming up with robust solutions that are based on technology. Making quality upgrades and consultancy expenses tax deductible will go a long way in strengthening India's brand as the "Pharmacy of the World".
- Government procurement to give a most favoured status to start-ups by waiving the required three-year market standing and the minimum revenue threshold will help grow this sector.
- Medtech and Diagnostics are the preferred start-up options of the day. While seed and angel capital is providing its backing to the proof of concept effort of start-ups, the next phase of funding to scale up and commercialise the process is seriously lacking in India. Therefore, an innovation fund of Rs. 50 crore for Medtech start-ups to develop low-cost, rapid diagnostics tests for rare diseases may be created.
- Customised tax rebates for green manufacturing, R&D expenditure, and setting up of pilot plants should be introduced. Grants for training programs and tax holidays for indigenously developed biopharma drugs could also be helpful in this regard.
- New drug development is a highly capital-intensive, time consuming project. Often, after large amounts of time and money have been invested into a project, it has to be aborted. Since R&D work often requires contract sites to take it forward, it turns out to be even more expensive. For a long time, the industry has been asking for higher weighted average deduction in their tax liabilities. Almost all reports on pharmaceuticals (particularly biologicals) have recommended a higher weighted deduction. There is a strong case to reconsider this request and increase the rates significantly.

6.11 Policies to mitigate other challenges

6.11.1 Environmental clearance challenges

6.11.1.i Short-term measures

Standing Empowered Committee

Consultations with industry representatives (particularly the Bulk Drug Manufactures Association) suggested that the biggest obstacle among the implementation issues was environmental clearance. A standing empowered committee should be constituted headed by a very senior functionary of the Ministry of Environment and Forests to resolve outstanding issues in a time bound manner. This committee should be able to provide guiding interpretations to different rules and regulations and if enabling provisions are considered necessary, they should be made in the relevant legislation.

Ministerial level standing committee

A **ministerial level standing committee** must be constituted to resolve outstanding environmental issues. This committee must meet at least once a month. All issues regarding environmental clearance in the pharma sector should be divided according to their gravity between two segments. The major

ones should be resolved by the ministerial standing mechanism and the lesser ones should be assigned to the official standing mechanism suggested earlier. On the basis of interaction with the industry and other experts, it is concluded that the moment some of these issues are resolved, the industry will develop trust in the relevant mechanism and facilitative action will bring productive gains and encourage investments. Since the Government has now announced a new scheme for APIs, it is even more important to create these mechanisms with a time bound agenda so that all the outstanding issues are sorted out.

6.11.2 Export-related challenges

6.11.2.i Short-term measures

Export Incentives

It was not unexpected to see that industry representatives would like to retain all export linked incentives. However, issues around their WTO compatibility have arisen and the Government has decided to discontinue these incentives. Instead, a new scheme which will neutralise only those taxes and levies which are currently not reimbursed will come into operation soon. This scheme is not likely to provide incentives to the same extent. The recently introduced scheme on APIs has provided for production linked incentives for APIs. However, formulations and other products will be deprived of such benefits. Recognising that pharmaceuticals is a champion sector with tremendous promise, India must find a way of maintaining incentives to the existing level. The Baba Kalyani report on SEZs is awaiting Government decision. The principle recommendation there is to do away with the export linkage of the incentives. Elsewhere in this report, the concept of export hubs has also been advocated. In view of the pressure on resources and the strong eligibility of pharmaceuticals for incentives, a production linked scheme applicable to a special category of medicines can be devised. The criteria for such eligibility can be location in special economic zones and applicability to selected product streams which involve use of specifically selected technologies, use locally produced inputs (APIs) under some criteria, and bring back lost production to India under some pre-determined criteria.

6.11.2.ii Medium to long-term measures

Trade Engagements

At the global level, India has maintained active engagement in inter-governmental institutions such as WIPO, WTO and WHO. Mechanisms have been put in place to ensure lateral streamlining in the positions taken by each of these institutions. This has helped address the issue of our defensive interests being raked by vested interests. However, there is a strong need to aggressively pursue interests in regions and markets of potential. This involves negotiating favorable tariffs for products of our interest in existing FTAs through review mechanisms and even outside of FTAs through cooperative dialogue with interested parties. Besides the modern allopathic medicine, there is a tremendous scope of growth for the traditional medicine segment. At present, some MOUs have been signed with countries which have a traditional medicine discipline in their healthcare system. These have not, however, paid dividends so far. As a matter of fact, there is a good case for considering

sector cooperation agreements with countries in South Asia, Southeast Asia and many others which follow the traditional medicine discipline. This can help achieve regional recognition and secure market access for both practitioners and medicines. It also boosts cooperation in education and healthcare programs, besides setting up exchange programs for experts. There is a lot to learn from China in this area. Indian Ayurveda and Chinese Traditional Medicine are grounded on similar principles. China has been able to secure recognition in many markets. A calibrated cooperation arrangement with China can be considered seriously. Besides negotiating tariff reduction on relevant products for market access, the big challenge is to get effective market access in the partner markets. This requires addressing Non-Tariff Barriers. In all trade agreements India must negotiate a chapter on pharmaceuticals wherein, besides the tariff, a protocol of regulatory understanding should be negotiated. The latter will cover technical standards, pharmacopia recognition, mutual recognition arrangements or equivalence as applicable, registration and market authorization related issues, fees, entry of service providers, etc. There is no doubt this will be difficult to begin with, but India must take a principled approach to include a Pharmaceutical Annex in all agreements where India has an abiding interest.

Creation of EXIM Credit/ Special Purpose Vehicles

As discussed, the Indian pharmaceutical sector is confronted with various challenges, including insufficient investments and the slow pace of technology upgradation in the Indian pharma sector vis-à-vis the developments in the global pharma industry.

One novel solution for infusing funds in the knowledge intensive, R&D and technology hungry sector is the creation of Special Purpose Vehicles (SPVs) by key banks (Deepak, Joseph and Lanka). In this regard, the creation of a corpus with EXIM bank from the proceedings from disinvestments in pharma PSUs should be considered. All of these PSUs have lost their relevance now. At one point in the history of the sector, these entities rendered yeoman's service, but now the only productive asset they can offer is the large real estate that each of them has. These assets should be monetized and used for promoting research in cutting edge areas.

6.11.3 Policies for promoting manufacture of medical devices

6.11.3.i Medium term measures

The Government also announced incentive schemes for the medical device sector. The major elements of these two schemes are as follows:

(a) Promotion of domestic manufacturing of medical devices

- Grants will be given to states to establish 4 Medical Device Parks in the country.
- A Maximum grant of Rs 100 crore will be provided for each park to create modern common facilities such as component testing centres, electro-magnetic interference laboratory, medical grade low-vacuum moduling, sterilization and electricity testing centre, and so on.

(b) Production Linked Incentive (PLI) scheme to help manufacturers of medical devices of the target segment

- Provide incentive at 5% for 6 years to manufacturers of medical devices of 4 categories: 1-Cancer

care/ radio therapy medical devices 2-Aesthetic & cardio-respiratory medical devices, 3-Radiology & nuclear medicine devices, 4-All implants like cochlear & pacemakers;
- Rs 3,420 crore will be distributed as incentive to the manufacturers under the scheme;
- GOI is also envisaging additional production of medical devices of Rs 68,437 crore during the first 5 years and about Rs 19,000 crore of import substitutions per annum.

In this report, the medical devices sector has not been covered. Suffice to say that the sector holds great promise for India and has been designated as a priority sector by the Government. The announcement of two new schemes is proof of the Government's commitment to the sector. The complexity of the medical device sector is high due to the evolutionary nature of the sector in India. There is a huge potential for growth and the established global manufacturers have visible interest in playing a significant role in India. A regulatory framework is yet to evolve, and domestic production is much lower than imports in the low technology segment. Foreign investment and technical regulations (besides the regulatory framework and technical skills) are of utmost importance. A conducive pricing framework to maintain a balance between consumer affordability and investor excitement is of great value. It will be useful to build a technical institution at the national level for research, development, technology dissemination and local adaptation to embed the finer long term perspectives on the sector within the country. The institutional framework could be a hub and spoke architecture involving a central institution laterally connected with globally well accepted institutions such as the IITs and IIScs. A network along the lines of NIPER for the medical devices sector could also be established to cater to skill transformation, development, training, and adaptation on a regular basis in a public-private mode.

6.11.4 Schemes for MSME

6.11.4.i Short-term measures

The pharmaceutical sector in India is unique in accommodating a vast spectrum of manufacturers in terms of their scale and size. The imperatives of investments, technology, regulatory compliances and the need for global reach have little justification for very small entities, as they find it difficult to grow and remain contract manufacturers for large brands. Technology and product specialisation are great differentiators, rendering blanket support to all small entities is a waste of resources. In any case, budgetary resources are hard to come by and the kind of pressure on them in view of existing gaps and inadequacies in the sector capacities should not allow for a thin spread of resources. It is important that these resources are pooled and used for technical upgradation and support to entities which bring in breakthrough technologies and outcomes. They require niche resources. Therefore, the MSME ministry should actually optimise its resources by spending them on such new age companies rather than duplicating the efforts of the Department of Pharmaceuticals in supporting routine upgradation schemes. Instead, such resources could be pooled for a faster coverage for GMP upgradation. MSME also supports cluster development for enhancing productivity and competitiveness. This duplication of resources is neither conducive to a targeted approach nor is it an efficient use of resources. It would be more efficient if these resources could be added to the schemes for development of biopharmaceuticals.

6.11.5 Need for non-price ceiling mechanisms

6.11.5.i Short or medium-term measures

The price ceiling policy has been in place for more than two decades. India has one of the lowest drug prices in the world. But the out-of-pocket expenditure on healthcare remains high (61%) and many Indians continue to be deprived of access to life-saving drugs. In terms of their relative per capita income, Indian consumers pay more than people in high-income countries. Hence, accessibility and affordability still remain critical challenges in India's healthcare system.[224]

Instead of price controls, other mechanisms like promoting competition among manufacturers, strictly regulating the quality of drugs, bulk procurement of generic drugs by public institutions for distribution (Tamil Nadu being a good example), increase in public spending on healthcare, and tackling information asymmetry by promoting transparency will deliver better outcomes for India's pharmaceutical industry.[225] There has been an overreach on price control lately, when the National List of Essential Medicines was unduly enlarged. Besides leaving no incentive to produce such products, it also sets up Indian exporters at a disadvantage in foreign markets as the DPCO mechanism turns out to be a referencing mechanism for buyers leading to further shaving off of the margins. In this background, the DPCO mechanism needs a review. It is not advocated that price control should be altogether given up but the scope, the methodology and the alternatives stated above should be considered before considering any further expansion of the NLEM.

6.11.6 Continuing with the Brand India pharma campaign

6.11.6.i Short to medium-term action

Strategic marketing and a dynamic recognition of challenges and their redressal are essential elements for making any industry successful. Brand India Pharma is a comprehensive policy initiative launched by the Department of Commerce to establish the credibility, affordability and sustainability of India's medicines across the globe. It is a Pharmaceutical Export Promotion Council (Pharmexcil) and India Brand Equity Foundation (IBEF) initiative under the Department of Commerce. The Government of India launched it in the year 2012, aiming to highlight the value proposition of Indian pharma globally. By highlighting the value and quality of the Indian pharma industry, worldwide, Brand India Pharma has successfully gained better market access for Indian medicines in many regions, and achieved cooperation in lowering certain barriers to Indian exports-including stringent and excessive regulations in countries like Japan among others. It has consistently raised its voice with regards to definitions of counterfeit and spurious drugs, especially in the European Union countries. The campaign has been playing a key role in regaining and enhancing the position of Indian pharma industry worldwide and is actively working towards creating solutions to challenges faced by Indian pharma in the international markets. The campaign must dovetail with our trade engagements globally. It should also consider relatively unexposed markets and add elements such as language training and collaboration with new global agencies for wider and deeper reach.

[224] https://theprint.in/opinion/indias-price-control-policy-has-destroyed-drug-manufacturers-this-is-how-they-can-be-saved/338095/
[225] Ibid

6.11.7 Bridging the academia and industry gap

6.11.7.i Short to medium-term actions

In order to spark innovation in the sector, a strong interface between academics, research organisations and the industry should be established. India still lags behind in discovering and creating novel drugs, though it excels in exporting generics and is also an emerging player in the creation of bio similars.[226] It is suggested that dedicated research institutions or universities should be identified, and regions where Indian pharma manufacturing is concentrated should be assigned to each of these institutions to focus upon. This ensures a clear and dedicated connection between various segments of the industry and these institutions. The creation of Skill Development Centers through PPP in the clusters is also recommended. Dedicated funding schemes to enable such connections and projects may be put in place (HLAG Recommendations). The Government has set up many National Institutes of Pharmaceutical Education and Research (NIPER). It was reported by some experts and industry representatives that the intent with which these institutions was created has not been served. While 9 such institutions have been set up, they still lack an organized long-term vision and appropriate leadership. While they have been turning out pharmacy graduates, very little contribution in terms of extension research has come from them. In the academia-industry linkage, NIPERs should also be roped in. Through planning and dedicated resource sharing between Government and industry, each such triumvirate should be assigned a specific problem to address, and a time frame to offer solutions. This mechanism should be laterally associated with a panel of financing institutions such as venture funds and angel investors. In order to provide a comprehensive forward-looking leadership, the Government must assign the responsibility to a distinguished Indian working anywhere in the world, commit to him full autonomy and provide dedicated resources to run a full-scale Pharmaceutical Research Program within the triumvirate institutions.

Conclusions

The nature and diversity of the Indian pharmaceutical market, healthcare objectives and legal system pose unique challenges for the pharmaceuticals sector in India. The challenges are diverse-the Indian pharmaceutical sector has to face them with more courage to emerge as one of the leading players in the world pharmaceutical market, and to achieve progress in healthcare.[227]

In sections 6.7-6.10 some of the action points which can help build a robust pharmaceutical sector for 2030 have been highlighted. It may be observed from the above that many of the action points deal with existing policies or practices and provide suggestions to make production and exports easier and cheaper. But a significant part of the suggestions addresses very substantive aspects of the sector, as India holds great promise in this sector and must prepare itself to deal with the changes that technology and business practices will impose upon us if we do not prepare for them now.[228]

[226] Leo, 2019, September 25
[227] https://www.investindia.gov.in/sector/pharmaceuticals
[228] https://www.investindia.gov.in/sector/pharmaceuticals

Annex 6.1 BDMA Response

BDMA response to draft MOEF notification No. G.S.R.44 (E) dt. 23rd Jan'2020 on the Environment (Protection) Rules, 1986, in Schedule-1, for serial number 73, Effluent standards for Bulk drug and Formulation (Pharmaceutical).

BDMA would like to take this opportunity to respond to the draft notification on standards for Pharmaceutical industry published on 23rd January 2020. BDMA promotes environmental stewardship and recognizes the Central Pollution Control Board's efforts for striving to address the environment protection and antimicrobial resistance issues. **However, it is important that the approach is science-based, attainable, and balanced between protecting the environment and providing life-saving medicine to India and the world.**

BDMA and its members believe that the proposed environmental standards for the pharmaceutical industry will pose significant negative impact on companies operating in India. The proposed standards will result in minimal environmental protection and will place undue cost on industry with detrimental effects on pharmaceutical manufacturing in India.

BDMA's specific concerns about the proposed standards are outlined below:

1. ***Compulsory parameters for effluent standards: ZLD units must comply with all compulsory parameters which also includes bioassay test:***
   The compulsory parameters on the Effluent standards of final outlet of ETP mentioned to comply with "Bio-Assay Test as per IS: 6582-1971". We suggest to remove this Bio Assay test from the parameters list as the final outlet of ETP is utilized in Utilities (Boiler/cooling tower) and is not been discharged outside. So for Zero Liquid Discharge plants need to be excluded on Bio Assay Test from compulsory parameters.

2. ***Additional parameters listed in Table A***
   These shall be limited to the industries those are not Zero liquid discharge plants and not applicable to Industries with ZLD.

3. ***Additional Parameters: Active Pharmaceutical ingredient concentration of 0.05 mg/ lit***
   API concentration mentioned in additional parameters for API manufacturing units (S. No 73, point no.ii) shall be reviewed. Further, it is not clear if this limit is to be applied for individual API or total API content for a multi-product plant. There is no general analytical test to measure total API in effluent like there is for BOD, COD, etc. This requires a molecule specific test with a validated test method. This is not feasible for facilities that manufacture multiple products, which could exceed over 100 products for large sites. Furthermore, there are several analytical challenges for this proposal, including potential interference of one molecule on other, as well as the presence of other components, which could make testing inaccurate or impossible. **To our knowledge, this is the first attempt globally to implement a general API standard such as this.** The proposed API limit is not a science-based, risk-driven target. This does not account for the type of API, chemical or physical properties, ecological toxicity, human health risk, published PNECs, etc. **For example, an API that is a nutritional agent or vitamin will have a permit limit lower than methylene chloride, cyanide, arsenic, or lead per the proposed standards. Keeping above points in mind, API concentration limits mentioned in 'Part D' shall be withdrawn.**

Since final treated effluent is sent for Utilities as recycle water there is no possibility of water being discharged. Hence here also for ZLD units this parameter can be excluded.

4. ***Different discharge standards for CETPs and ETPs.***
   MoEF&CC notification S.O. 4(E) dated 1st January, 2016 gives permissible values for discharge of treated effluents separately for Inland source water, on land for irrigation and into sea. Whereas proposed notification G.S.R. 44(E) gives only one limit for discharge of treated effluents form ETPs of individual units. What should be the limits if individual units directly discharge to different water bodies?

5. ***Emission Standards -limiting value for concentration of process reactor vents/tank farm vents***
   We would like to stress that all the vents in tank forms are covered with Nitrogen blanketing & vents from process reactors is connected to a primary condenser followed by secondary condenser and this secondary condenser vent is connected to scrubber. Hence these limiting values can mentioned for scrubber outlets.

6. ***The total losses of solvent should not be more than 3% of the solvent consumed.***
   This is practically impossible to implement & achieve. Every emission vent (fluid beds, coating pans, reactors, tanks, etc.) would have to be equipped with a control device and the control devices would have to be at least 97% efficient. As of now, there is no established control device which can ensure 97% recovery for the solvents used in Pharma industry.

   Furthermore, not all solvents are equal in their hazardous properties. There are many complex (science-based) regulations on solvent emissions and mostly are based on solvent type and annual quantity that triggers requirements for permitting and control devices, beyond certain threshold quantities. Implementing a blanket, generic solvent emission requirement such as this is haphazard, and industry will be clueless in complying with this requirement.

   As such, the existing regulation of 95% recovery of solvents itself is practically impossible to achieve. Request to review this requirement, keeping in mind the Characteristics of the solvent, available proven technology and practical difficulty of implementing for each & every emission source. Hence request you to amend the same as "Total emission losses shall be <3%".

7. ***Section D: Antibiotic Residues in the treated effluent of Bulk Drug and Formulation Industry and CETP with membership of Bulk Drug and Formulation Units – Individual antibiotic residues will be equal to or less than the values given;***
   Industry has had a concerted and collaborative approach to address antimicrobial resistance since release of the Davos Declaration 2016 and forming of the AMR Industry Alliance. The Alliance brings together over 100 biotech, diagnostics, generic and research-based pharmaceutical companies which have forces to provide sustainable industry solutions to curb antimicrobial resistance. Members of the AMR Industry Alliance developed the Industry Roadmap for Progress on Combating AMR, which laid out four key commitments including measures to reduce environmental impact from production of antibiotics.

   The Alliance developed a unified approach to establishing discharge targets to guide environmental risk assessments for the manufacture of antibiotics, referred to as Predicted No-Effect Concentrations (PNECs). These PNECs were published in September 2018 for industry as

science-driven, risk-based targets for antibiotic discharge. These PNECs values consist of PNEC Minimum Inhibitory Concentration (PNEC-MIC) values based on the approach published in Bengtsson-Palme and Larsson (2016) which are intended to be protective of resistance promotion and PNEC-Environment (PNEC-ENV) values generated from eco-toxicology data generated and shared by Alliance members which are intended to be protective of ecological species. **These PNEC targets are applied in the receiving aquatic environment.**

The release of the PNEC targets was an important milestone as this was the first-time companies have collated, shared, analyzed and published antibiotic data as part of a multi-stakeholder collaboration. The AMR Alliance believes working toward achieving these antibiotic discharge concentrations will be both protective of ecological resources and lower the potential for the evolution and selection of AMR in the environment.

The Limiting concentration of Antibiotics mentioned is almost 40% of the internationally agreed PNEC values released by AMR industry alliance. Further, AMR industry standard is applicable at the point of release into the environment whereas the draft standard is proposing more stringent norm at the outlet of Individual Industry. It is also important to understand that, these are targets that the industry is working toward. **They cannot be achieved in short term without significant cost and detriment to the pharmaceutical industry and supply of much needed medicines.** Secondly, the limitations specified on Antibiotic residues in the treated effluent of bulk drug and formulation industry shall be exempted for Zero Liquid Discharge units as no water will be discharged and shall not affect the aquatic system.

8. ***Foot note Section D: Sludge containing antibiotic residues shall be incinerated.***
Suitability of waste for incineration depends on calorific value. If more inorganics are present in sludge, Incineration results in Clinker formation. As such, secured landfills are provided with suitable liners and are a scientifically established disposal method for ETP sludges having more inorganics. Hence, industry may be allowed to continue with present practice of opting for Land fill or Incineration based on calorific value. Alternatively, Industry shall be permitted to use cement plant facilities for co-processing, which has been established and approved by CPCB. **Better options like secured Landfill, co-processing available for sludge disposal than incineration shall be allowed.**

BDMA is concerned that the proposed new standards will impose draconian regulations on industry and are not in line with the scientific community or the industry initiatives explained above.

While BDMA recognizes there is opportunity for new or modified standards, it is important to incorporate science-driven, risk-based standards with appropriate implementation periods. Therefore, adoption of the proposed India standards including the effluent limits and air emission standards in 60 days is unrealistic due to required capital investment, potential facility and infrastructure enhancements, and required control technologies necessary to meet the levels of emissions proposed.

BDMA and its members look forward to continuing to work with CPCB to develop appropriate standards in order to ensure India can continue to be a leader in providing the world with high-quality, life-saving medicine.

Annex 6.2 Agenda and action points for IDMA meeting

(Meeting with the Ministry of Environment, Forest and Climate Change; Ministry of Chemicals & Fertilizers (Department of Pharmaceuticals); CPCB and SPCBs)

A. POLICY ISSUES

S.N	Issue raised by IDMA	CPCB's view	Further comments/ action desired from	BDMA Comments
1.	Products Change capacity and equipment upgradation without fresh EC or current lengthy "change of product mix" application procedure. (EC takes 12 months and change in product mix takes 3 to 6 months)	Product mix is already allowed by MoEF& CC vide notification dated November 23,2016 "*Any change in product-mix, change in quantities within products or number of products in the same category for which environmental clearance has been granted shall be exempt from the requirement of prior environmental clearance provided that there is no change in the total capacity sanctioned in prior environmental clearance granted earlier under this notification and there is no increase in pollution load. The project proponent shall follow the procedure for obtaining No Increase in Pollution Load certificate from the concerned State Pollution Control Board". From the above provision, It was already exempted from the requirement of prior EC subject to obtaining" No Increase in Pollution Load certificate".* In the name of expansion only change in product mix are allowed but such exemption may not be applicable for expansion of production capacity including expansion of utility facility like installation of additional boiler etc.	MoEF/ SPCBs	As long as there is no increase in pollution load any increase in production quantity should be also allowed without seeking fresh EC. For any increase of utilities beyond the threshold quantities only then fresh EC to be required.
	Review of EC for product mix changes and introduction of Self-Declaration of No Increase in Pollution load	Industry representatives were of view that obtaining " *No Increase in Pollution Load certificate*" is time consuming. MoEF&CC stated that for authentication of data and procedural analysis of the project, services of notified institutes/labs/ consultants are required. MoEF&CC may simplify/modify the procedures to resolve various concerns raised by the Association.	MoEF/ SPCBs	Noted and agreed
2	Remove CFE and CFO under Water act for ZLD units.	This pharma industrial sector is the one among the '17 categories of Highly Polluting Industries and generate all sorts of pollution. The total score of pharma industry is 95 under red category industries. As it is generating toxic effluent, so it not a dry industry. ZLD units are not dry units. These units generate effluent but has provision to re-use treated effluent in the process or utilities. Hence exemption from CFE and CFO cannot be granted under the Water Act,1974.	SPCBs	Under Water act. CFE to be taken only if there are any discharges outside. Hence ZLD units to be exempted from seeking CFE under water act.
3	Fix threshold limit for units 5(f) to Schedule to EIA Notification	As per the Existing provisions for item 5 (f), Small units i.e. with water consumption < 25 m3/day, fuel consumption < 25 TPD and not covered in the category of MAH units as per the Management, Storage and Import of hazardous Chemical Rules, 1989 are categorized as Category B.	MoEF	Ammendment to be introduced immediatetly

		The amendment proposed in the draft EIA Notification, 2019 in which Micro and Small units as defined by the MSME are exempted from requirement of prior EC and Medium units as defined in MSME Act are categorized as B2 projects (no requirement of EIA and Public hearing). Regarding "irrespective of discharge quantity" or "threshold limit of 25 KLD above" need to apply EC may be discussed with IA division of MoEF&CC for further clarification.		
4	Remove CFE (Consent for Establishment) for units having EC.	CPCB vide letter dated 02.02.2017 issued an advisory to all the SPCBs/PCCs to follow the mechanism for granting consent to various categories of industries as :- "All the projects requiring Environmental Clearance may be exempted from obtaining the Consent to Establish (CTE). Such projects may be directly granted Consent to Operate subject to EC and installation of pollution control devices". Further, CPCB issued the directions under Section 18 (1) (b) of the Water Act, 1974 and the Air Act, 1981 regarding streamlining of consent mechanism vide Letter No. B-29012/MSME/IPC-VI/2017-18/12189-12230 dated 2nd November, 2018. However, Hon'ble High Court of Delhi has stayed the directions of CPCB vide order dated 2nd November, 2018 in W.P. (CIVIL) 13521 of 2018 in the matter of Social Action for Forests and Environment Vs. Union of India and Ors. The similar case has also been filled before Hon'ble High Court of Madras (WP No. 3046 of 2019 and WMP No. 3316 & 3320 of 2019) As informed of MoEF&CC, a mechanism has been evolved by considering the concerns of Hon'ble Court, however implementation will be subject to the outcome of Hon'ble court.	MoEF / CPCB	Await final order from Honourable High Court
5	Specify threshold capacity for boilers for which no EC is required	As per the provision under 1(d) of EIA Notification2006, up to 5 MW Thermal Power Plant using coal/lignite/naptha & gas; up to 15 MW based on biomass or non-hazardous municipal solid waste using auxiliary fuel such as coal, lignite / petroleum products up to 15% are exempt from requirement of prior EC.	MoEF	Even if there is an increase of 1MT/ hr steam generation SPCBs are insisting on fresh EC which is not correct. CPCB may send clarification to SPCBs.
6	Public Consultation for category A and category B1 units. (PH at site for ascertaining concerns of local people, Obtain responses in writing from other concerned persons, bonafide residents of affected zone to be allowed with due verification by revenue authorities)	The feasibility of implementation of such conditions on grounds need to be deliberated. This matter may be discussed with MoEF&CC.	MoEF	MoEF&CC may consider this proposal.

7	EC for industrial parks.	While granting EC for industrial area, the impacts from each activity did not take into the considerations and normally granted based on the conceptual plan. When project is proposed to establish, on case to case is evaluated. However, as per the provision of EIA Notification, public consultation is exempt for all project or activities located within industrial parks or estates (item 7(c) of the schedule) approved by the concerned authorities.	MoEF	EC for industrial parks is given based on detailed EIA and total pollution loads are fixed. Individual units are allotted the effluents loads based on the size and acerage of the plots in such a way that the total aggregate load of industrial park is within the approved load. Hence individual units need not go for EC again. This is being followed in Pharma park at Vizag by APPCB.

B. OPERATIONAL ISSUES:

S.N	Issue raised by IDMA	CPCB's view	Further comments/ action desired from	BDMA Comments
1	Promote Common Effluents Treatment Plants in Industrial Clusters.	CPCB has no objection if individual pharma industry uses the facility of CETP and up to the design capacity of CETP. Further in cluster area it should be encouraged. The common infrastructure facilities like CETP should treat the effluent properly and recycle back to the parent industry. Simultaneously, the industry should also utilize the treated effluent of CETP in their process to achieve ZLD conditions. As the member units of CETP are not utilising the treated effluent of CETP, random monitoring is required by PCBs is required to see the operational status of CETP. Because if CETP fails to meet the prescribed outlet norms than the entire member units will be suffered.	SPCBs	The Environment (Protection) Rules, 1986 --Standards for emission and discharge of environmental pollutants – Schedule –I, the inlet standards given in Sr.No. 55 has been amended by MoEF&CC removing the limit of allowing only units generating 25 KL/ Day effluents to send effluents to CETPs In spite of this many SPCBs are not allowing units generating more than 25KLD effluents to use CETPs. Even MoEF&CC in the EC given to Hyderabad Pharma City had put a condition that units generating more than 25 KLD effluents should have their own ETP which defeats the purpose of above notification of MoEF&CC. There is no consistence in MOEF&CC procedure in this regard.

2	Combined treatment of industry treated effluents in STPs. (to maintain BOD/ COD ratio of 0.5 is highly favourable for biological treatment)	CPCB has no objection if STP effluent is mixed at inlet of CETP and provided it should meet the inlet and outlet standards of CETP. As per the CETP notification 2016, for combined discharge of treated effluent and sewage on land for irrigation, the mixing ratio with sewage shall be prescribed by State Board.	SPCBs	CPCB should proactively encourage this and extend all possible technical assistance.
3	CETP inlet effluents standards.	CETP is designed based on inlet and outlet characteristic of effluent. If CETP is failed to meet inlet norms than it is very difficult to achieve outlet norms because of design removal efficiency of various pollutants. CPCB has no objection if individual pharma industry can meet the CETP inlet effluent norms. For each Common Effluent Treatment Plant (CETP), the State Board will prescribe Inlet Quality Standards for General Parameters.	SPCBs	Noted
4	All units irrespective of size should be permitted to use CETPs.	It is always encouraged the industry to use common facilities such as CETP, TSDF, Common solvent recovery plant, etc. Govt of India is also giving subsides for developing such facilities. Further the industry should utilize under capacity CETPs so that desired quality of treatment is provided. For each Common Effluent Treatment Plant (CETP), the State Board will prescribe Inlet Quality Standards for General Parameters, Ammonical Nitrogen and Heavy metals as per design of the Common Effluent Treatment Plant (CETP) and local needs & conditions. CPCB has no role, it is up to SPCBs.	SPCBs	CPCB to send communication to all SPCBs in this regard.
5	Units sending effluents to CETPs, to be ZLD facilities.	The reuse of treated effluent in gardening/ horticulture shall not be considered as ZLD in chemical industries. Simultaneously, the industry should also utilize the treated effluent of CETP in their process to achieve ZLD conditions.	CPCB/SPCBs	If the treated effluents from CETP are again taken back by industry and used in process, then such units should be considered as ZLD units.
6	Discharge standard for effluents sent to sea through marine outfall.	MoEF&CC has notified effluent standards for CETP in 2016 in which it is prescribed for COD -500 mg/l provided a minimum initial dilution of 150 times at point of discharge and a minimum dilution of 1500 times at appoint 100 m away from discharge point, then SPCB may relax the COD standard. Provided that the maximum permissible value of COD in treated effluent shall be 500 mg/l. Present norms for Deep Sea Discharge are based on dilutions available at different points of discharge. It is requested to provide scientific evidence/studies (NIO/ NEERI) regarding dilutions available for relaxing the COD norms without negative impact on the Environment.	IDMA/BDMA	Inspite of all norms followed APPCB is not allowing Pharma City at Vizag to discharge effluents with a max. COD of 500mg/lit.
7	Set up of Private CETPs to supplement existing CETPs.	CPCB neither support nor oppose the private effluent treatment facilities. CPCB's main objective is by adopting whatever treatment facilities either by the industry or by the CETP should achieve the prescribed norms.	IDMA/BDMA	Noted

Plastic Waste Management Rules,2016

S.N	Issue raised by IDMA	CPCB's view	Further comments/ action desired from	BDMA Comments
1	API units not to be put under the Brand Owner classification.	API units are not covered under the definition of brand name /producer. However the same to be confirmed after seeking production details.	CPCB	CPCB to clarify to SPCBs
2	Under PWM Rules the Brand Owners to collect back MLP waste.			Noted
3	Definition of Operation.	Operating is manufacturing and selling for brand owner.		
4	Ambiguity in the rules.	Major ambiguity areas have to pointed out.		

Other Issues

S.N	Issue raised by IDMA	CPCB's view	Further comments/ action desired from	BDMA Comments
1	CPCB and NEERI expert technical guidance and advice.	Whenever BDMA/IDMA sought guidance and clarification, CPCB provided them clarification through interaction meetings held from time to time.		For any problematic issues CPCB and NEERI should proactively provide technical advice and also keep industry abreast with latest technologies from time to time.
2	Closure orders issued should give time for safe shutdown of plant.	CPCB issued closure direction to the unit in case of grave injury was observed as per the E(P) Rules. But whenever industry requested extra time for implementation citing a justification like batch process will be completed in 48 hours and 72 hours etc, we consider from safety point of view. We generally send closure direction to the unit by email for shutdown and for disconnection of electricity, we send by speed post to the electricity department. So, industry get sufficient time for safe shutdown before disconnection electricity by the Electricity Department.	SPCBs	CPCB to send clear guidelines to SPCBs to give sufficient time to shut down. Disconnection of power should be done only in extreme cases when industry is not complying with closure orders. It is to be noted that even if the unit is shut down process industry needs power for general lighting, R&D, quality control lab, preserving retention samples, cold storage if required of chemicals stocks still in the factory, fire hydrant system etc.
3	Punishments for any offences to be uniform.	CPCB has developed a guideline/Policy for issuance of directions u/s of E(P) Act,1986 on basis of Industrial Inspection. Depending up on level of observations/Non -compliance General directive for corrected action, SCN, Closure direction is issued to the industry.	SPCBs	Noted

4	Spent solvents/ by-products procedure under Rule 9 of Hazardous and Other waste (Management and Transboundary movement) Rules, 2016. **(Solvent recovery outside manufacturing units is not permitted by SPCB)**	Spent solvents generated from the pharmaceutical industry is categorized as hazardous waste in schedule 1 category-28.6 in Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (new rules). **Now common solvent recovery plant has already installed in Gujarat.**	Hazardous Rule 2016	CPCB to encourage Common solvents recovery facilities in all states.
5	Minimum 95% recovery of solvents in drug processing.	MoEF& CC has also mentioned in the EC conditions that Condensers shall be provided with HTA and residence time to achieve more than 95 % recovery. Recently for Paint industry MoEF& CC has notified standards i.e. the total losses of solvent should not be more than 5% of the solvent consumed, if solvent consumption less than 1000 tons/Annum; and (ii) the solvent loss should not be more than 3% of the solvent consumed, if solvent consumption greater than 1000 tons/ Annum. Pharma industry can be achieved the standard as they have dedicated solvent recovery plant. Now common solvent recovery plant has already come up and it can sort out the problems for small pharma industries.	BDMA/IDMA	95% recovery of some solvents is not possible unless highly sophisticated facilities are provided. Complying with this clause by SME units is very difficult.
6	Environmental infrastructure for use by the industries on commercial basis.	The conditions laid down in the consent to established (CTE) issued by SPCBs/PCCs, it is clearly mentioned that the industry should start production only after establishing environment pollution control measures. The onus on the industry and responsibility of the industry to operate the system. The responsibility cannot be shifted to the regulatory agencies.	IDMA/BDMA	When an industrial park is developed by a private agency or State Infrastructure corporations, the responsibility of providing Environmental infrastructure should be put on the developer by SPCBs/CPCB/MoEF&CC. Only then the industrial park should be given permission to operate.
7	Constitution of SEIAA by inclusion of experts from Industry have more practical experience	The matter is dealt by MoEF&CC.	MoEF&CC	MoEF&CC to look into and implement
8	Storm water drain of adequate capacity shall be provided in all industrial estates/ clusters to carry rain water.	The matter is may be discussed Industrial Infrastructure corporation.	SPCBs	CPCB /SPCBs/MoEF&CC should give orders in this regard without which there is possibility of flooding of industrial estates during heavy rains leading to severe water contamination.

				Many times, the lakes are contaminated both by industrial effluents and domestic sewage. In such cases only the industry is given notices and punished but no action initiated against the ULBs and Municipalities.
9	Remove DG sets more than 5 KVA for internal consumption from 'Red' category industry and permit DG set up to sanctioned load without fresh EC.	DG sets are mainly air polluting. Total score of DG set is 62.5, so it is coming under Red Category of polluting industries. DG sets consume diesel @ 0.21 litres/hr/KVA at full load. Average running is taken @ 12 hrs / day although many of the DG sets run for more than this period.	CPCB/MoEF	MoEF&CC may consider this request

CHAPTER

Conclusions

7.1 Introduction

The Government has been working to identify policies which promote exports and build a better operational environment. Different Ministries/ Departments have initiated policy reforms in this process. This Chapter provides a list of policy areas the Government is trying to address. In several instances, these initiatives include policies identified as priority areas of concern or low-hanging fruits, i.e. policies that could be addressed within a year or so. This implies a need for greater focus on monitoring and addressing glitches which prevent the successful implementation of these policies. The Chapter on mobile phones notes the areas where the Government has been trying to improve policies for some time, and makes the case for a Management Information System (MIS) which could be a method of co-ordination amongst the relevant Government Ministries/ Departments and industry.

In addition to the issues mentioned above, a number of concerns affecting ease of doing business were discussed at the meetings of the National Committee on Trade Facilitation. They include:

1. **Cumbersome Procedures** for support schemes, approval processes, E-Way Bills;
2. **Delays** in multiple tasks, including provision of subsidy, refunds, decisions on appeals;
3. **Difficulty to Comply** with Fees and Penalty;
4. **Hardcopy Submission** of Documents even after having submitted them electronically;
5. **High Costs Associated** with Appeal and Review;
6. **Large Extent of Documentation** required;
7. **Implementation Gaps** in Direct Port Delivery (DPD) Scheme;
8. **Inconsistency in Clearance Procedures** across ports;
9. **Irregularity** in Conducting Customs Clearance Facilitation Committee (CCFC) and Permanent Trade Facilitation Committee (PTFC) Meetings;
10. **Lack of Regularly Monitored** Time Release Studies;
11. **Limited Coverage** of Advanced Ruling Scheme;
12. **Loopholes** in the Risk Management System;
13. **Operational Glitches** in e-Sealing Process;
14. **Origin and Classification** of Goods;
15. **Procedural Complexities** Associated with Shipping Lines;
16. **Lack of Mechanism** for addressing disposal of Rejected Goods That Have Been Imported;
17. **Technical Glitches** in e-SANCHIT;
18. **Unavailability of Information** on a Common Designated Portal;
19. **Untimely Clearances** from Partner Government Agencies (PGAs);
20. **Need to Bring All Partner Government Agencies on Board;**

21. **Need to Integrate Indian Customs Electronic Gateway (ICEGATE) with other systems** such as GSTN and SEZ Online.

From the above, it is evident that there are a large number of policy-related concerns. Addressing them all will take too much time and managing the implementation of policies will become a diffused effort. Therefore, for effective implementation, it is necessary to focus on limited number of priority areas, especially those for which a positive result could be achieved within an reasonably short period of time. The priority areas could be selected based on criteria such as:

- Areas specified as high priority concern by the exporters in any specific sector;
- Policy measures which could be addressed within about one year ("low hanging fruit");
- Policy measures which are an obstacle for several sectors, i.e. the adverse impact of the policy measures is cross-sectoral.

General conclusions based on the discussions with stakeholders reaffirm a number of the points mentioned above, namely:

1. The Government-industry interaction process is good, and industry is closely involved in discussions with the Government;
2. The Government has been focusing for several years to address obstacles to exports and to enhance operational efficiency for specific sectors;
3. However, implementation of policies is not satisfactory. A number of areas where the Government has been facilitating/ implementing support policies are precisely the areas which are still a matter of major concern for industry/ exporters;
4. Key priorities need to be identified and addressed with urgency;
5. Positive results for certain policy measures could be achieved relatively quickly, within one year ("low hanging fruits");
6. A systematic priority approach could be developed for focus on effective implementation, providing insights such as:
   - Identifying policy-related concerns that are relevant across several sectors;
   - Development of a Management Information System based on a simple format to monitor the progress made in addressing the concern raised by exporters;
   - Specifying the criteria to prioritise among the various policy initiatives to address them in a timely manner.
7. It would be useful to develop an Index for Ease of Doing Exports to give a focus to export promotion, in a manner similar to the emphasis given by the Government to Ease of Doing Business and Make in India.

7.2 Modelling results

The overall effects on the Indian economy of changes in specific policies were analysed using GTAP analysis. This assessment shows a substantial impact of certain policies for the six sectors selected for this report. The analysis was to consider the impact in the six sectors if two policy changes take place, namely: (a) immediate refund of GST, and (b) the removal of tariffs on inputs for the six selected sectors.

With an immediate refund of GST, the overall (i.e. economy-wide) GDP increases by 2% and overall

exports rise by nearly 7%. Aggregate imports also increase by 6%, and overall employment rises by about 4%.

The effects of immediate refund of GST on individual sectors are much larger, with exports from the six sectors showing double-digit growth.

The results of a removal of tariffs on key inputs vary across sectors. One consistent result is that there is a very significant increase in exports across the sectors. Further, this positive impact on exports is much larger than that after an immediate refund of GST. Sectoral output and employment effects are also large, except for two sectors, i.e. pharmaceuticals and mobile phones. These two sectors domestically produce inputs behind a tariff wall (and thus have comparatively inefficient domestic production). Further, the share of imported inputs in their total value added is large, which means that the removal of tariffs on imported inputs would reduce costs for a substantial part of the input base. This would nonetheless reduce demand for domestic inputs for the sector, and lead to lower sectoral employment as well. However, as noted above, exports from these sectors increase very substantially because of an increase in efficiency with cheaper imported inputs. This situation shows that any import-substitution policy would have an adverse effect on exports, unless supplementary support and facilitation policies are implemented for exports.

The effects of implementing the Phased Manufacturing Program (PMP) in the mobile phone sector were also analysed using GTAP. The PMP introduces tariffs on products that have to be encouraged for domestic production. With the higher tariffs, domestic output is estimated to increase by 14%, while exports decrease by around 30%. Once again, this shows the conflict between an import-substitution policy and achieving higher exports.

7.3 Sector specific findings and suggestions

7.3.1 Textiles and garments

The analysis carried out and the recommendations made for this sector are presented below. They are classified into short-term or medium/ long-term policies, depending on whether they can yield benefits in the short-term or need a longer time frame.

Table 7.1: Summary of Recommendations for Textiles and Apparel Sector

	Recommendations	Short Term	Medium/ Long Term
1.	Cotton farmers to be provided Direct Benefit Transfer		Y
2.	Cotton Spinning Machinery to be included in ATUFS		Y
3.	Yarn exports to be included in RODTEP	Y	
4.	GST on MMF fibre, yarn and fabric to be brought down to 5%	Y	
5.	Rayon Grade Wood Pulp import tariff to be brought down to 0%	Y	
6.	Subsidy Structure for Weaving machinery under ATUFS to be revised		Y
7.	Fabric exports to be eligible for RODTEP	Y	
8.	R&D for Technical Textiles to be enhanced		Y
9.	Subsidy structure for Processing Machinery to be revised		Y

10.	Bank Loan repayment period for Processing units to be revised		Y
11.	ATUFS for garments/ made-ups to be revised		Y
12.	AAS procedures to be simplified for MMF fabric imports	Y	
13.	New garment/ made-ups units to be located in backward states		Y
14.	Section 51 of the Factories Act to be amended	Y	
15.	A few export oriented mega textiles parks to be set up		Y
16.	Differential rates for power for SME and large sector should be removed		Y
17.	Industrial power rates for textile industry to be rationalised		Y
18.	Import tariffs for machinery for textiles and garments to be reduced to zero		Y

7.3.2 Gems and jewellery

Major hurdles to conducting gems and jewellery (GJ) trade in India include: the difficulty in the ease of doing business owing to India's regulatory system, high import duties, a credit crunch, customs-related issues, unfavorable policies of SEZs and infrastructural bottlenecks. The financial year 2019-20 has seen an estimated 15-20% job loss in the diamond cutting and polishing centres of Surat and other smaller centres amid a demand slowdown.[229] Given the current scenario, it will be difficult for India to achieve its target of USD 60 billion exports by the year 2022 and India will not be able to attain a global leadership position in gems and jewellery. Looking at the significance of the sector to the GDP and the employment opportunities for both skilled and unskilled workers, it is very important for India to formulate policies to revive the growth of the GJ sector so that the industry's vision 2022 can be achieved and India emerges as a global leader in GJ exports.

Feedback from the major industry players suggests some low-hanging fruits for policy improvement. These would form a short-term package of policy measures to increase exports:

- The customs officials should use the random sampling method instead of checking each and every consignment;
- There should be consistency in the documentation of different export related agencies and ministries;
- There shouldn't be any import taxes on returned consignments;
- The certification requirement that the "same gold that has been imported should be used for making the jewellery and exporting it" is inefficient and impractical. It should be removed;
- With self-certification, trade up to a particular value should be customs duty-free;
- Incentives provided to the gold jewellery exporters should be stopped;
- The Government should provide the bank guarantee based on the export value of an exporter instead of on the basis of the certificate of trade balance;
- Special Notified Zones (SNZs) must work effectively so that all the producers of diamonds, miners, etc. could use it as a centralized place to sell their diamonds instead of going to Dubai and Antwerp, which costs an additional 2%;
- The import duty on diamonds is around 7.5-8%. It should be reduced to 2.5-4%. The opportunity cost of the high import duty is that it prevents India from becoming a diamond hub;

[229] https://economictimes.indiatimes.com/markets/commodities/news/gems-Jewellery-eyes-new-markets/articleshow/73065388.cms?-from=mdr

- Customs duty should be reduced to the previous level, i.e. 10% on gold imports from 12.5%;
- The GST refund process should be eased and made more transparent;
- Commission on credit cards should be reduced to less than 1% so that digitization can be improved in the gems and jewellery sector;
- The Government should participate in the generic promotion of diamonds by contributing the required amount of funds to the GJEPC diamond support fund;
- The interest rates should be reduced for working capital. The suggestion from industry/ exporters is that the Government should charge Libor + 300 points for working capital. The exchange rate risk should be mitigated in the loans;
- For rural buyers, the Government should increase the limit to Rs 5 lakh from Rs 2 lakh for the purchase of gold jewellery.

7.3.3 Automotive sector (auto components and automobiles)

The suggested changes include addressing issues ranging from policy focus to procedural simplification and facilitation. The broad areas of suggestion from industry and experts include:

- Changes in tax rates, especially a reduction in GST rates to build a healthy domestic market demand, because 85% of domestic production is sold domestically;
- Remove high tariffs on raw materials and intermediates to make the industry globally competitive;
- Provide support for technological advancement and R&D support to help the industry remain at the top-end of the technology curve globally;
- Choosing the right markets for free and preferential trade agreements to help build stronger market access for exports;
- Regular bilateral discussions with markets of interest to boost market access and remove non-tariff barriers to export;
- Prioritise trade facilitation measures and remove procedural hurdles to improve industry turn-around times.

Suggestions Based on Feedback from Industry Stakeholders

The suggestions provided by the industry and experts in the area may be divided into three categories: short-term suggestions or low-hanging fruits, medium-term suggestions, and long-term suggestions that may require greater stakeholder consultations and time for implementation. The basic operational framework emphasized by the industry is that the domestic market is their mainstay, and this market gives them their stability for production and enables them additionally to focus on export markets. At present about 15% of domestic production is exported. The aim is to increase exports so that the share of exports in domestic production becomes 35% to 40% by 2026. However, that journey requires the balance and support of a stable and growing domestic market.

Medium-Term

The auto sector is completely driven by technology. In the medium-term, the industry is of the view that there is a need for a greater thrust towards R&D and design in the country. All possible policies that can spur R&D need to be put in place. **The auto component sector has identified the following five areas for R&D thrust:** (a) Emission; (b) Safety; (c) Industry 4.0; (d) Electric Mobility and (e) increasing electronics in vehicles.

Long-Term

Exports can only be built if market access is available. For this, the auto sector is of the view that there is a need to identify non-tariff barriers in markets of interest and hold bilateral discussions to facilitate their removal. Further, the sector has also identified specific markets where India could have free trade agreements to improve market access. The examples of such markets are provided in the more detailed discussion of the sector in Chapter 4 of this Report.

All these measures, the industry feels, will help India become a strong global hub for small cars.

7.3.4 Electronics with a focus on mobile phones

The electronics sector is an important economic and strategic part of the economy, with domestic and global demand that will keep increasing strongly. Its market base and impact on India's socio-economic situation will become even more pervasive as technological options expand the use of ICT in daily life. Within electronics, mobile phones are the most significant part of the sector, an aspect recognised by the National Policy on Electronics 2019 (NPE 2019). This policy document has established a very high target for the exports of mobile phones by 2025- an increase of about 66 times compared to the exports in 2018-19. An assessment of the situation reveals that this high target is feasible provided a strategic approach is combined with relevant policies and a focus on effective implementation. The approach is to use large global firms as the engine of growth and exports. All the main global firms are present within India. They need to be encouraged to develop an export hub in India, supported by the policies required to improve their operating conditions for competing in the export markets.

Discussions with the industry/ exporters have shown that the list of their policy concerns is a long one. It is important to distinguish amongst the various concerns in terms of:

- Priority areas of policy concern;
- Policy concerns that could be addressed within a relatively short period ("low hanging fruits").

The areas identified by foreign and domestic firms overlap, but domestic firms have some additional specific requirements to obtain targeted support in the current financial situation, and to develop an eco-system that enables a sustained improvement in their technical capabilities.

The common priority areas for both domestic and foreign firms are:

1. Provide financial and other support similar to that provided by competing economies, e.g. Vietnam and China. Examples are: Income tax exemption/ refund; reduced cost of land, development of land and building; financial support for accommodation for labour; low cost of power and uninterrupted power supply; financial and policy support for capital investment; and for working capital (interest subvention); training of workers, R&D and Design; the establishment of supply chains/clusters, improving skills; and ease of doing business in terms of Customs-clearance and turn-around time for the factory. The Government of India has announced a major support programme for electronics, including mobile phones (see Annex 5.2). The impact of these policies will depend on the details of these policies yet to be decided by the Government, and the effectiveness with which they are implemented in a timely manner.

2. Stop changes in the Customs notifications that introduce the change in policy with retrospective effect. Retrospective implementation adds to the costs for the exporter. It also makes it difficult to meet the contractual conditions with international clients.
3. Remove/ reduce ambiguity in taxation.
4. Address delay in refunds of GST and customs duty.
5. GST on capital (buildings and capital goods) and services is not refunded under the GST policy.
6. Remove inverted duties. Till recently, there were inverted GST duties. The Government has addressed this issue by increasing the GST rate on mobile phone to 18%, thus removing inverted GST duty.
7. As an integral part of a framework to analyse the impact of policy prior to implementing it, the policy-maker should consider the impact of policy on the cost of working capital. The large number of parts and components in the value chain imply that delays or policy changes could have a considerable impact on working capital cost, adversely affecting competitiveness.
8. Create a real single-window system for the multiple approvals required. The nodal Ministry for a specific industry should be a single window to co-ordinate with all other relevant Ministries/ Departments at the Central and State level, to improve policy impact and facilitation.[230]
9. Proper or effective implementation of policies does not take place in most cases. This is a major shortcoming that needs to be addressed because this is what gives the true impact to policies announced by the Government. A major focus is required to improve effective implementation of policies.
10. Do not make changes in policy without due examination of the implication for export.
11. Develop an Index for Ease of Doing Business for Exports.

The priority areas emphasised by domestic firms include:

- Easier access to loans.
- Credit Guarantee and Interest Subvention Scheme for the domestic industry.
- Creating a National Design Ecosystem for mobile firms.
- Revamp the Electronics Manufacturing Clusters (EMC) Scheme.

7.3.5 Pharmaceuticals

The major importance and diversity of the Indian pharmaceutical market, the nation's healthcare objectives, and its legal system pose unique challenges for the pharmaceutical sector. Growth in population, changes in lifestyle and the high demand for quality health care implies a consistent increase in the size of the Indian/ global pharmaceutical market. The sector's potential for growth is large but the challenges are very complex.

Over time, the Indian pharmaceutical sector has lost its previous prominence in KSM/ API production. Further, the ongoing technological changes and emergence of new products pose challenges to this sector. Chapter 6 discusses a number of specific policy initiatives to support the Indian pharmaceutical sector to face these challenges, emerge as one of the leading players in the world pharmaceutical market, and contribute effectively to healthcare in India and abroad.

[230] These could include MoC, MoF, DPIIT, MeiTy, MoEF, Customs, GST, PCB etc. The co-ordination may be required even at secretary level and in some case up to the Minister level.

Three main objectives are the focus of these policies. One, strengthen India's ability to increase its domestic manufacturing of KSM/ Intermediates/ Bulk Drugs/ APIs. Two, facilitate production and exports by addressing policy obstacles, simplifying processes, reducing duplication, improving regulatory systems, creating mechanisms for reducing regulatory barriers to trade, and reducing the undue burden on account of domestic policies. Three, a strategic approach and forward-looking programme to promote the development of biopharmaceuticals in India.

The Government of India has announced some significant policy initiatives that cover some of these policies. However, implementation has been weak. Hence a number of policies have been outlined on better implementation. Further, the strategic policies should be designed to take this sector forward by promoting APIs and biologicals. However, there are a number of policies related to the ease of doing business that should also be implemented.

Chapter 6 proposes three high-level initiatives to ensure proper implementation. A set of two Committees are suggested to address environmental policy-related concerns. One Committee would be within the ministry of Environment and Forest, chaired by a senior official to co-ordinate and address the concerns at the operational level. The other would be a Minister-level Committee to address other high-level matters. All other policy implementation issues should be addressed by another High-Level Committee, chaired by the Principal Secretary to the Prime minister, with Secretaries of other relevant ministries.

These High-Level Committees should be established within a few months itself to follow the important support policies announced on 21st March 2020. They can begin to focus on effective implementation of the policies that is needed for the industry's efficiency and export competitiveness.

Priority policy areas for the short-term include:

1. Appropriate amendments to the Environmental Impact Regulations.
2. Address regulatory issues.
3. Reduce delays through faster processes and time-bound decisions.
4. Simplify processes and approvals.
5. Implement important national/ international decisions on quality upgradation.
6. Financial incentives.
7. Reduce the burden imposed by the GST scheme.
8. Avoid duplication of schemes and ensure better streamlining and efficiency of schemes.

Medium-term policy recommendations include:

1. National Action Plan for Biopharmaceuticals to run for the next ten years be adopted.
2. A time-bound programme for strengthening the lab infrastructure.
3. India must strive for recognition of its Pharmacopia.
4. Membership of Pharmaceutical Inspection Convention (PIC) and Pharmaceutical Inspection Co-operation Scheme (PIC/S).
5. Pharmaco-vigilance framework needs to be institutionalized.
6. Build a technical institution at the national level for research, development, technology dissemination and local adaptation to embed the finer long-term perspectives on the medical device sector within the country.

7. Develop better Academia-Industry linkage.
8. Trade Agreements.
9. Establish Traditional Medicine sector cooperation.

Short to Medium-term schemes would include:
1. Utilise methods other than price controls.
2. Promote the Brand India pharma campaign.

7.4 Low-Hanging Fruits, and Examples of Policies that Have Been Implemented for a Number of Years but Still a Concern for Exporters

Several chapters have identified a number of low-hanging policies that could be improved/ implemented within about one year. In addition, a list of policies that have been implemented for a few years but have not been effectively implemented are also identified.

Implementation

A high-level co-ordinating committee should be established to monitor and co-ordinate effective policy implementation. The process should use a simple format to gather the relevant information for monitoring, identifying and addressing implementation problems associated with specific policy concerns. Chapter 5 has provided an example for such a format.

Summary

While several issues and solutions discussed were specific to sectors, there were some suggestions that cut across sectors. For example, the impact of late refund for GST is felt by all the sectors. The GTAP modelling exercise showed that an immediate refund of GST would have a huge impact on output as well as exports. Another important factor analysed through GTAP simulation was removal of tariffs on critical inputs. This analysis showed strong positive effects on exports for all sectors, and for domestic production and employment for four out of six selected sectors. Two sectors which have a relatively large share of imported inputs in total production (pharmaceuticals and mobile phones) showed a very high growth of exports, but a reduction in domestic output and employment as a result of removing tariffs on key inputs. This indicates the inability of an import substitution policy to achieve export growth as well. Tariffs on inputs result in higher domestic production, but create inefficiencies which reduce the level of potential exports. Thus, supplementary policies to support and facilitate exports are required for generating export momentum, especially if the country is implementing an import substitution scheme for any sector.

The message that it is difficult to achieve export momentum through import substitution policies is clear also from the GTAP simulation of the effects of the PMP scheme for the mobile phone sector. The PMP scheme imposes tariffs on parts and components of mobile phones. The simulation shows that the PMP results in a small increase in employment and domestic production, but a substantial decrease is sectoral exports of mobile phones. An interesting result is that the inefficiencies introduced by the protectionist regime give rise to a much larger negative effect on overall exports and imports. This shows both a transfer of resources towards a tariff-protected inefficient activity as well as the

extensive linkages of the mobile sector with other parts of the economy. It is thus very important to create efficiency of export operations, and remove especially the obstacle to exports created by domestic policies.

This report has identified some policies which could be improved or implemented effectively within about one year (low-hanging fruits). These should be immediately addressed by the Government in all the selected sectors, because positive results for export performance can be achieved within a relatively short period of about one year or so. In addition, priority areas of actions which are likely to have a large impact on export performance have also been identified for policy actions.

There is an overlap between high priority policy areas and those which are low-hanging fruits, as shown in Figure 7.1 below. Figure 7.1 highlights the policy initiatives which deserve special focus. Boxes A and B show low-hanging fruits; of these, Box A contains low-hanging fruits with a large impact, i.e. these are both high priority policies and low-hanging fruits. The highest priority should be given to Box A. Together with these policies, those in Box B should also be considered initial focus points to reduce the obstacles facing export performance.

Figure 7.1: Conceptual Framework for Ascertaining Priority Amongst Different Policy Initiatives

	Large Impact of Policy	**Small Impact of Policy**
Quick Impact of Policy (Within One Year – Low Hanging Fruit)	(Box A) High Priority Policies Based on Feedback from Exporters	(Box B) (a) High Priority Policies Based on Feedback from Exporters (b) Other Policies
Medium Term Impact of Policies (Impact takes more than One Year and Up to Three years)	(Box C) (a) High Priority Policies Based on Feedback from Exporters (b) Other Policies	(Box D) Other Policies, i.e. other than high priority Policies

Note: By definition, policies that are considered by exporters to be high priority, are not those with a small impact.

Box C has policy initiatives which will take more than one year and up to three years to implement. This category would contain some policies which are emphasized as priority by the industry/ exporters, but would require further consideration and the development of new or improved institutions. Among the policies in Box C, the high priority areas identified by the industry/ exporters should be given greater emphasis.

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EXPORT-IMPORT BANK OF INDIA

HEAD OFFICE

Centre One Building, 21st Floor, World Trade Centre Complex, Cuffe Parade, Mumbai 400 005.
Phone: (91 22) 22172600 Fax : (91 22) 22182572
E-mail : ccg@eximbankindia.in Website: www.eximbankindia.in

LONDON BRANCH

5th Floor, 35 King Street, London EC2V 8BB United Kingdom
Phone : (0044) 20 77969040 Fax : (0044) 20 76000936 E-Mail :eximlondon@eximbankindia.in

DOMESTIC OFFICES

Ahmedabad

Sakar II, 1st Floor,
Next to Ellisbridge Shopping Centre,
Ellisbridge P. O.,
Ahmedabad 380 006
Phone : (91 79) 26576843
Fax : (91 79) 26578271
E-mail : eximahro@eximbankindia.in

Bangalore

Ramanashree Arcade, 4th Floor,
18, M. G. Road,
Bangalore 560 001
Phone : (91 80) 25585755
Fax : (91 80) 25589107
E-mail : eximbro@eximbankindia.in

Chandigarh

C- 213, Elante offices, Plot No. 178-178A,
Industrial Area phase 1,
Chandigarh 160 002
Phone : (91 172) 2641910
Fax : (91 172) 2641915
E-mail : eximcro@eximbankindia.in

Chennai

Overseas Towers,
4th and 5th Floor,
756-L, Anna Salai,
Chennai 600 002
Phone : (91 44) 28522830/31
Fax : (91 44) 25224082
E-mail : eximchro@eximbankindia.in

Guwahati

NEDFi House, 4th Floor, GS Road,
Dispur, Guwahati 781 006
Phone : (91 361) 2237607/609
Fax : (91 361) 2237701
E-mail : eximgro@eximbankindia.in

Hyderabad

Golden Edifice, 2nd Floor,
6-3-639/640, Raj Bhavan Road,
Khairatabad Circle,
Hyderabad 500 004
Phone : (91 40) 23379060
Fax : (91 40) 23317843
E-mail : eximhro@eximbankindia.in

Kolkata

Vanijya Bhawan, 4th Floor,
(International Trade Facilitation Centre),
1/1 Wood Street,
Kolkata 700 016
Phone : (91 33) 22891728/29/30
Fax : (91 33) 22891727
E-mail : eximkro@eximbankindia.in

New Delhi

Office Block, Tower 1, 7th Floor,
Adjacent Ring Road, Kidwai Nagar (E)
New Delhi - 110 023
Ph.: +91 11 61242600 / 24607700
Fax: +91 11 20815029
E-mail: eximndo@eximbankindia.in

Pune

No. 402 & 402(B) 4th floor Signature
Building, Bhamburda, Bhandarkar Rd.,
Shivajinagar, Pune - 411 004
Phone : +91 20 25648856
Fax:+91 20 25648846
E-mail: eximpro@eximbankindia.in

OVERSEAS OFFICES

Abidjan

5th Floor,
Azur Building,
18-Docteur Crozet Road,
Plateau,
Abidjan,
Côte d'Ivoire
Phone : (225) 20 24 29 51
Mobile : (225) 79707149
Fax : (225) 20 24 29 50
Email : eximabidjan@eximbankindia.in

Addis Ababa

House No. 46,
JakRose Estate Compound,
Woreda 07,
Bole Sub-city,
Addis Ababa,
Ethiopia.
Phone : (251 116) 630079
Fax : (251 116) 610170
E-mail : aaro@eximbankindia.in

Dhaka

Madhumita Plaza, 12th Floor,
Plot No. 11, Road No. 11, Block G,
Banani, Dhaka, Bangladesh - 1213.
Phone : (088) 0170820444
E-mail : eximdhaka@eximbankindia.in

Dubai

Level 5, Tenancy 1B,
Gate Precinct Building No. 3,
Dubai International Financial Centre,
PO Box No. 506541, Dubai, UAE.
Phone : (971 4) 3637462
Fax : (971 4) 3637461
E-mail : eximdubai@eximbankindia.in

Johannesburg

2nd Floor, Sandton City Twin Towers East,
Sandhurst Ext. 3, Sandton 2196,
Johannesburg, South Africa.
Phone : (27) 716094473
Fax : (27 11) 7844511
E-mail : eximjro@eximbankindia.in

Singapore

20, Collyer Quay, #10-02,
Tung Centre, Singapore 049319.
Phone : (65) 65326464
Fax : (65) 65352131
E-mail : eximsingapore@eximbankindia.in

Washington D.C.

1750 Pennsylvania Avenue NW,
Suite 1202, Washington D.C. 20006,
United States of America.
Phone : (1 202) 223 3238
Fax : (1 202) 785 8487
E-mail : eximwashington@eximbankindia.in

Yangon

House No. 54/A, Ground Floor,
Boyarnyunt Street, Dagon Township,
Yangon, Myanmar
Phone : (95) 1389520
Mobile : (95) 1389520
Email : eximyangon@eximbankindia.in

Centre One Building, 21st Floor, World Trade Centre Complex, Cuffe Parade, Mumbai - 400 005.
Ph.: (91 22) 22172600 | Fax: (91 22) 22182572
E-mail: ccg@eximbankindia.in | Website: www.eximbankindia.in, www.eximmitra.in

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