

Diagnostic Report for MSME Sector in Haryana

Report No. 2017-Chandigarh-0002

Submitted to
Department of Industries & Commerce
Government of Haryana

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Glossary of Terms

AAGR	Average Annual Growth Rate
ACMA	Automotive Component Manufacturers Association of India
ASI	Annual Survey of Industries
BDSP	Business Development Service Providers
CAGR	Compound Annual Growth Rate
CFC	Common Facility Center
CGTMSE	Credit Guarantee Fund Trust For Micro and Small Enterprises
CLU	Change in Land Use
DPP	Defence Procurement Procedure
DMIC	Delhi Mumbai Industrial Corridor
DLCC	District Level Clearance Committee
DGOF	Director General Ordnance Factories
DRDO	Defence Research and Development Organization
EDC	Estate Development Charges
EMC	Electronics Manufacturing Clusters
EPP	Enterprise Promotion Policy
ESDM	Electronic System and Design Manufacturing
FDI	Foreign Direct Investment
GFCF	Gross Fixed Capital Formation
GSDP	Gross State Domestic Product
GSVA	Gross State Value Addition
HICCI	Haryana Industry Chamber of Commerce and Industries
HSIDC	Haryana State Industrial Development Corporation
IDLS	Integrated Development of Leather Sector
IEM	Industrial Entrepreneurs Memorandum
KMP	Kundli-Panesar-Palwal
MSME	Micro Small and Medium Enterprises

M-SIPS	Modified Special Incentive Package Scheme
NIFTEM	The National Institute of Food Technology Entrepreneurship and Management
NCR	National Capital Region
NIC	National Industry Classification
OEM	Original Equipment Manufacturer
PMEGP	Prime Minister Employment Generation Program
PPP	Public Private Partnership
REC	Renewable Energy Credits
RPO	Renewable Purchase Obligation
SEZ	Special Economic Zone
SPV	Special Purpose Vehicle
FDA	Food and Drug Authority
VAT	Value Added Tax



Executive Summary

Executive Summary

Since its inception in 1966, in a span of over 5 decades, the state of Haryana has sustainably transformed from an agrarian economy to a well-rounded economy with a thriving secondary sector and tertiary sector. The economy of Haryana, in the last four years i.e. 2013-14 onwards has gradually grown to surpass the all-India average growth rate across primary, secondary and tertiary sector. As in 2016-17, in terms of gross value added (at constant 2011-12 prices), Haryana's primary sector grew at 6.4% (all India average: 4.1%), secondary sector grew at 6.4% (all India average: 5.2%) and tertiary sector grew at 10.8% (all India average: 8.8%). With close to 18% share of manufacturing in the total GSDP of Haryana and growing consistently at a CAGR of 7% in the last 5 years, Haryana has emerged as one of the leading states in India with the all-India average manufacturing GSDP contribution (around 17-18%) and competing with industrially advanced states like Gujarat (26-28%) and Maharashtra (18-21%).

Manufacturing has therefore been a bright spot in Haryana's economic growth story and particularly its industrial transformation.

The state will have a number of strengths on which to build, including an improving business environment, a thriving policy & regulatory environment and a huge derived demand from sectors like construction. Backed by a strategic locational advantage with 57% area falling within the NCR with 21 national highways (2482 kms of length), major rail routes covering the State and its traditional natural resource strengths (cotton, rice, fisheries); Haryana's industrial sector and specifically its manufacturing and MSMEs is strongly positioned in creating a strong footprint on the national manufacturing landscape.

As in 2016, Haryana has close to 90,000 MSMEs (with a total investment-exceeding Rs.15, 000 crore and generating employment for more than 8.90 lakh persons) with major MSME concentration around automobile, food & beverages, textiles, engineering and metals. The manufacturing MSME spectrum in the state comprises both state of the art medium enterprises (In places such as Panipat, Faridabad and Gurgaon) as well as a large number of traditional micro and small enterprises (mainly in districts such as Panchkula, Ambala, Karnal, Rohtak, Kaithal etc.)

With big-ticket industrial projects, like Delhi-Mumbai Industrial Corridor, Amritsar-Kolkata Industrial Corridor and Kundli-Manesar-Palwal global corridor; augmentation of investor-friendly infrastructure capacities will have to be the top priority so as to leverage the benefits from agglomerations. On the policy front, the Haryana Enterprise Promotion Policy 2015 has laid out a transformational roadmap for industrial growth of Haryana with MSMEs as focal point of strategic interventions. The Haryana EPP 2015 has also laid emphasis on focus sectors for the state such as scientific instruments, metal, plywood, light engineering and textile (as traditional clusters), apparel, footwear and dairy (rural functional clusters) and textiles and food processing (thrust /focus clusters).

Although the state has envisioned to establish itself as a thriving manufacturing destination, yet the MSMEs in the state suffer from lack of access to markets, finance, technology and infrastructure (hard and soft such as material testing facilities) in addition to lack of policy outreach and awareness amongst the MSME entrepreneur.

On the infrastructure front there is dearth of quality industrial infrastructure with absence of any established tool room to provide support to MSMEs for job works and product innovation as a glaring gap. In addition to the absence of tool room, there are no common facility centres and optimal capacity common effluent treatment plants in the state. This gap manifests in terms of low technology adoption and upgradation by the MSMEs in the state. The state of industrial agglomerations in the state-Industrial areas/parks and clusters has also been characterized by lack of quality infrastructure, lack of anchor investments and highest concentrations around few districts only. In terms of MSME procurement by CPSUs, Haryana contributes only 7% of total MSME procurement (to the tune of Rs. 41 crores) out of total procurement, in comparison to states like UP and Maharashtra (with 30% and 24% respectively) lending support to how vendor development in Haryana has been largely ignored. Further the demand- supply gap for manpower across unskilled, semi-skilled and skilled categories is high in industrially advanced districts like Gurgaon, Karnal which is touted to increase further between 2017-22. This is expected to be a major stumbling block for growth of MSMEs in Haryana.

Therefore given these strengths and weaknesses, ensuring synergy between these strengths while plugging the gaps will be crucial so as to boost long-term growth and create a vibrant, inclusive and competitive manufacturing sector and MSMEs in Haryana. Based on a detailed diagnostic assessment of MSMEs in the state through a bespoke primary and secondary research methodology, this report identifies the broad categories of interventions for making MSMEs dynamic and promoting priority sector growth. A three pronged approach is adopted to identify the priority sectors based on alignment with central and state government policy push, use regional spatial analytical tool (LQ) and cluster level interventions under the cluster development programme. This also forms the basis of cluster classification into sunrise, growth and mature clusters. The strategic initiatives are focussed around vendor development, cluster development, MSME facilitation & awareness and overall capacity building of the institutional stakeholders. Accordingly, the overall recommendation framework has been delineated and an implementable action map designed over the short term, medium term and long-term in alignment with government's focus and priority area.

In the short term-medium term, government interventions will focus on identification of potential competitive industrial clusters in the state and effecting interventions (hard and soft) in the identified clusters. On the vendor development front, sector focused vendor development programs will be the focus in the short term while strengthening and enabling the vendors in the state will be focus over the medium term. To facilitate MSMEs and build the capacities to DICs, investor awareness and creation of knowledge base for DICs will be the short term focus and capacity building programmes for DICs with institutional reorientation will be taken up in the medium term. Some of the other important medium term interventions will be innovation consortium and development of quality marking centres to cater to the MSMEs. In the long run, the cluster interventions (hard and soft) will cover all the districts and sector agglomerations and a strong focus will be laid on entrepreneurship development and vendor enablement.



01

Project
background and
methodology

1. Project background and methodology

1.1 Project Overview and Components

The project “MSME Ecosystem Transformation in the state of Haryana” establishes a centralized project management unit responsible for vision re-alignment for MSME sector, ease of doing business for MSMEs and transformation support for internal and external ecosystem. The key areas of interventions for the state are cluster development, vendor development, establishment of network of common facilities for key sectors and facilitation centres in the state.

The objective of the program is to provide MSMEs with a platform to become globally competitive.

The MSME economic transformation is divided into 4 tracks:

- ▶ Track1- Vendor Development
- ▶ Track2- Cluster Development and its implementations
- ▶ Track3- Establishment of MSME facilitation centres
- ▶ Track4- Capacity building and program management support

1.2 Need for diagnostic of state’s MSME sector

To prepare an effective roadmap for MSME ecosystem transformation in the state, it is important to understand the current situation and needs of the MSMEs in the state. The diagnostic study is therefore the first step towards the transformation of the MSME ecosystem.

A detailed diagnostic of MSMEs is crucial to align the focus sectors identified by the state government with the country’s trends and identify other high potential sectors. Additionally, the potential districts where the clusters are required, key interventions in technology, market, finance, quality, skills etc. and roadmap for achieving these interventions also needs to be identified.

Therefore, the key components of the diagnostic assessment are:

- ▶ Structural analysis and economic value addition of the state
- ▶ Industrial ecosystem and business environment
- ▶ Policy and regulatory framework
- ▶ District-level industry mapping
- ▶ Focus sector identification
- ▶ Gaps and challenges
- ▶ Recommendations with action map

1.3 Objective

The objective of this report is to assess the current state of Haryana's industrial sector and the MSMEs by looking into various components of the ecosystem, identifying the major gaps, designing recommendations and action plan.

The broad objectives of the diagnostic assessment are:

- 1 Understand and assess the industrial scenario of the state
- 2 Establish the importance of MSMEs in the state
- 3 Assess the national and state's scenarios of focus sectors
- 4 Enabling policies and regulatory frameworks for the industries in the state
- 5 District wise potential of MSMEs in the state
- 6 Identify key issues and challenges
- 7 Prepare action plan and provide recommendations on interventions required

Using a pragmatic approach, a recommendation framework with a detailed action map for ecosystem development across short, medium and long term will be developed taking into account, the as-is scenario, state's priorities, critical actors, opportunities & challenges and the ecosystem forces.

1.4 Approach & Methodology

As a first step, the current state of industry and MSMEs need to be assessed using primary and secondary research. Therefore, comprehensive secondary research has been carried out to understand the industrial scenario of the state, industrial ecosystem, policy and regulatory framework, focus sectors and clusters etc. using sources like, research reports, Govt. data, Policies, Govt. Gazettes, report compendiums etc. The findings of the secondary research have been validated and bolstered with the stakeholder's perspectives. Primary research has also been undertaken to understand the challenges and lacunae in the MSME clusters and the industrial sector as a whole. Some of the primary information sources used in the preparation of this report are stakeholder meetings, DIC, industry and cluster association visits. The focus of primary & secondary research and analysis has been, both, at the state level and district/cluster level.

Further, focus sector identification has been done using a three-pronged strategy- a) alignment with the national initiatives b) alignment with states' policy focus and c) use of analytical tools (spatial industry analysis)-Location Quotient Analysis.

The overall approach and methodology in preparing this report is summarised as below:

- 1** Stakeholder Discussion: Discussions with various stakeholders were carried out to develop a better understanding of the requirements for drafting the action plan. Their suggestions and views were also taken into consideration during the preparation of this detailed sector report.
- 2** District wise assessment: The industrial profiling of all districts in the state has been conducted. The type of industries, contribution to employment and percentage of units in the district have been mapped to understand the existing industrial footprint.
- 3** Issues and challenges: The industrial sector in the state faces challenges in a number of areas which are critical for a thriving industrial and manufacturing sector. Each of these areas is not just a challenge but also the potential where significant improvement can be and should be made. Assessment and addressing of these challenges is at the core of the manufacturing sector. The key issues and challenges related to the MSMEs have been captured and these act as major inputs for designing interventions & action plan.
- 4** Priority sector identification: The rationale of this analysis is to channelize the efforts—at supporting the development of high potential industries in the state. By targeting a strategic mix of industries that might offer significant future growth opportunities, in purely economic terms can be put to highest possible dividends.
- 5** Action plan for priority sector development: The identified priority sectors need to be given a strategic direction. With Make in Haryana initiative and Government's emphasis on development of priority sectors, it is important to develop an action plan with goals ranging from short term to long term.
- 6** Key interventions: Every strategic intervention will have its own support requirements. Some of the soft and hard interventions proposed help in achieving the desired objectives are mentioned in the action plan.

1.5 Organization of the report

Chapter 1: This chapter establishes the objective of the report along with approach and methodology adopted for preparation of the report.

Chapter 2: This chapter analyses the overall economic and industrial scenario of the state. The state's MSME position and its relevance for overall economic development is established. This chapter also details out the business environment of MSME sector.

Chapter 3: This chapter compares the scenario and growth opportunities of the focus sectors of the state with respect to the country.

Chapter 4: This chapter captures the list of key stakeholders who play an important role in MSME development.

Chapter 5: This chapter provides an analysis of district industry profiles of the state. The type of industries and sectors existing in each district of the state is mentioned.

Chapter 6: This chapter gives an insight into the key issues and challenges the MSMEs are facing in the state. The various issues have been mapped against the schemes provided by the Government of India and State Government.

Chapter 7: This chapter deals with the recommendation of focus sectors and clusters to be targeted in the districts across the state. The focus sectors in each district is identified through the location quotient framework combined with stakeholder consultation and their readiness for cluster development.

Chapter 8: This chapter discusses about the action plan that is required for holistic development of MSME sector. The key interventions for implementing the action plan is also mentioned in the report.

1.6 Way forward

EY shall work with Department of Industries & Commerce within the confined scope of work mentioned in this project and provide implementation and knowledge support to achieve the recommendations and action plan listed out in the report. The overall strategic roadmap and recommendations for MSME transformation is derived from the key challenges faced by Haryana's sector which needs to be addressed, on the one hand, while leveraging its traditional strengths, on the other.

As a first step towards implementing the proposed action plan, The Department of Industries & Commerce will have to in-principally approve the report and its recommendations and agree on an implementable action plan with timelines and resource requirements.



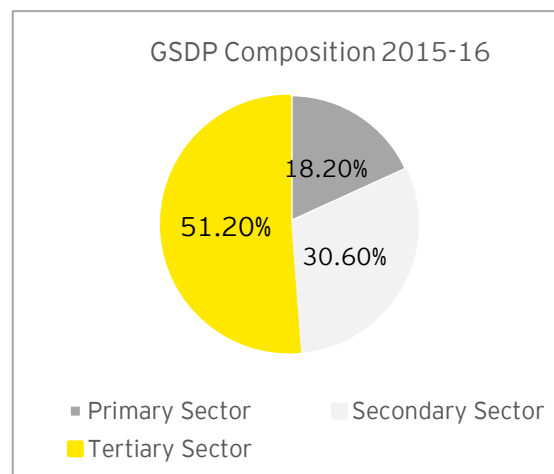
02

**Economic
scenario of the
state**

2. Economic Scenario of the state

Over the last 5 decades since its formation in 1966, Haryana has transformed and matured into a diversified economy with a thriving secondary and tertiary sector. From 1966-67 to 2015-16, the share of primary sector (agriculture/crops, livestock, forestry and fishing) went down from 56% to 18% while the share of tertiary sector (trade, repair, hotels and restaurants, transport, communication & storage, services) leapfrogged from 23% to 51%,. The share of secondary sector to the states' GSDP (manufacturing, mining & quarrying, utilities and construction) increased to 30% in 2015-16 from 20.5 % in 1966-67 at constant (2011-12) prices.

With the impetus laid on secondary and tertiary sector growth in the five year plans (2nd FYP onwards), the secondary and tertiary sectors have witnessed a growth uptick which resulted in a change in Haryana's GSDP composition with an increase in share of secondary and tertiary Sector and decreased share of Agriculture and Allied Sector in the GSDP.



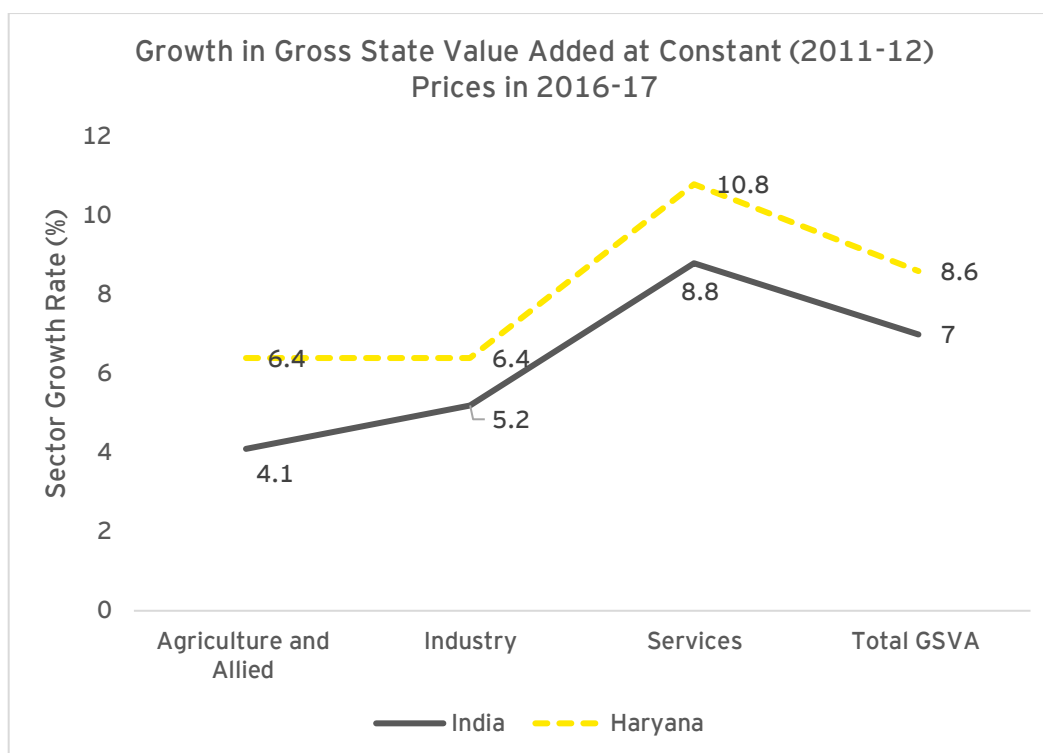
Source: Economic Survey of Haryana 2016-17

Figure 1 GSDP Contribution in Haryana-2015-16

2.1 Structural Analysis of Haryana

Despite having only 1.4% of the country's geographical area and 1.9% of total national population, Haryana enjoys economic salience at the national level, being ranked 11th in the country in terms of GSDP with nearly 3.4% contribution to India's GSDP.

As in 2016-17, in terms of gross value added (at constant 2011-12 prices), Haryana's primary sector grew at 6.4% (all India average: 4.1%), secondary sector grew at 6.4% (all India average: 5.2%) and tertiary sector grew at 10.8% (all India average: 8.8%).



Source: *Economic Survey of Haryana 2016-17*

Figure 2 Growth in GSVA in 2016-17: India and Haryana

The state has been leading in per-capita income terms. As per the Economic Survey, in 2014 Haryana was the leading state in per capita income terms followed by Maharashtra¹. In 2016-17, the state has registered a real GSDP growth of 8.75% at constant (2011-12) prices, higher than the All India GDP growth of 7.15% at constant (2011-12) prices. Haryana is one of the leading states in terms of per-capita income. In 2016-17², the per capita income of the State at constant (2011-12) prices is expected to reach at the level of Rs. 1,43,211 as against Rs. 1,33,591 in 2015-16 indicating an increase of 7.2 %.

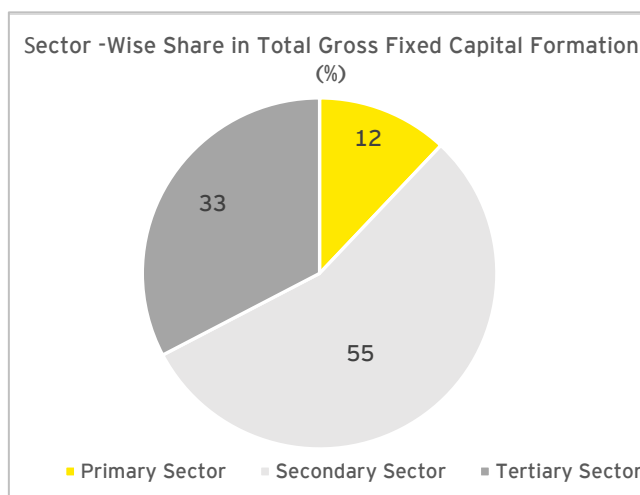
Employment: Although the share of primary sector has gone down but the agriculture and allied sector still remains an occupational mainstay (direct or indirect dependence) for the population with animal husbandry and dairy as leading job creators. However, to propel the state's economy and its population towards higher value adding industry and manufacturing sector, the Enterprise Promotion Policy 2015 has set a target of employment generation for more than 4 lakh persons over the coming years.

¹ <http://indianexpress.com/article/cities/mumbai/per-capita-income-state-second-only-to-haryana/>

² Haryana Economic Survey 2016-17

Investments (as measured by Gross Fixed Capital Formation-GFCF):

As a measure of the productive capacity of the economy, the GFCF was estimated to Rs. 36,158 crore during the year 2014-15 as against Rs. 33,584 crore during the year 2013-14 recording an increase of 7.7% during the year 2014-15. In terms of key economic sectors, secondary sector realized more than half (55%) of total GFCF followed by tertiary and primary sector at 33% and 12% respectively.³



Source: Economic Survey of Haryana 2016-17

Figure 3 Sector-wise GFCF in Haryana 2014-15

2.1.1 Overview of Haryana's Primary Sector

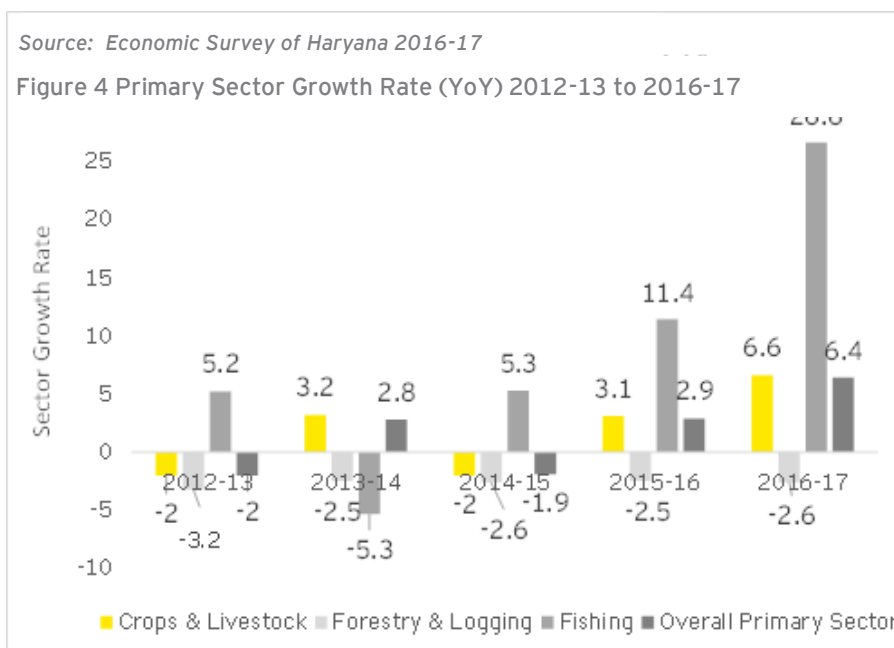
Agriculture including crop husbandry and dairy farming is the main component contributing about 93% in GSVA of Primary (Agriculture and Allied) Sector while the contribution of forestry and fishing sub-sectors in GSVA of Agriculture and Allied Sector is around 5 and 2% respectively (as in 2016-17)⁴.

The major part of the state is favourably positioned in terms of irrigation, agro-climatic and soil topography. The development of this sector is further propelled by robust infrastructure through roads, rural electrification, network of canals, development of market yards and a strong research and extension ecosystem as the growth catalysers.

Though traditionally an agrarian economy, the growth rate in terms of gross state value added (GSVA) at constant (2011-12) prices of the primary sector has been low around 2% CAGR from 2011-12 to 2016-17. The overall growth of the primary sector stood at 6.4% with a gross state value added at Rs. 69826 crores as in 2016-17.

³ Haryana Economic Survey 2016-17

⁴ Haryana Economic Survey 2016-17



From 2011-12 to 2016-17, forestry and logging have registered a negative growth while the fishing has been on a resurgence with an annual growth of 26% in 2016-17 (an uptick 2014-15 onwards). As in 2016-17, there are 17454.58 hectare ponds in Haryana with the state being ranked as 2nd in country in per hectare fish production.

Overall, the year-on-year growth rate from 2011-12 to 2016-17 has averaged around 1.6% only. Some of the reasons for this slowdown in the agriculture and allied sector have been a slow growth in the agriculture sector nationally, productivity drop and supply side uncertainties.

On the brighter side, the primary sector in Haryana has tremendous potential. The state enjoys traditional strengths in rice-wheat production system. The climate of Haryana is uniquely favourable for Basmati rice cultivation. Also the rain fed lands in the state are most appropriate for rapeseed & mustard, pearl millet, cluster bean cultivation, agro-forestry and arid-horticulture.

Currently, horticulture accounts for 6.4% of the total crop area in the state. Fruits, vegetables, flowers and mushrooms, including several types of medicinal mushrooms are important horticultural crops grown in Haryana which are in great demand nationally and internationally. Haryana is a leading mushroom producing state in the country despite being a non-consuming state, therefore providing an immense potential for exports.

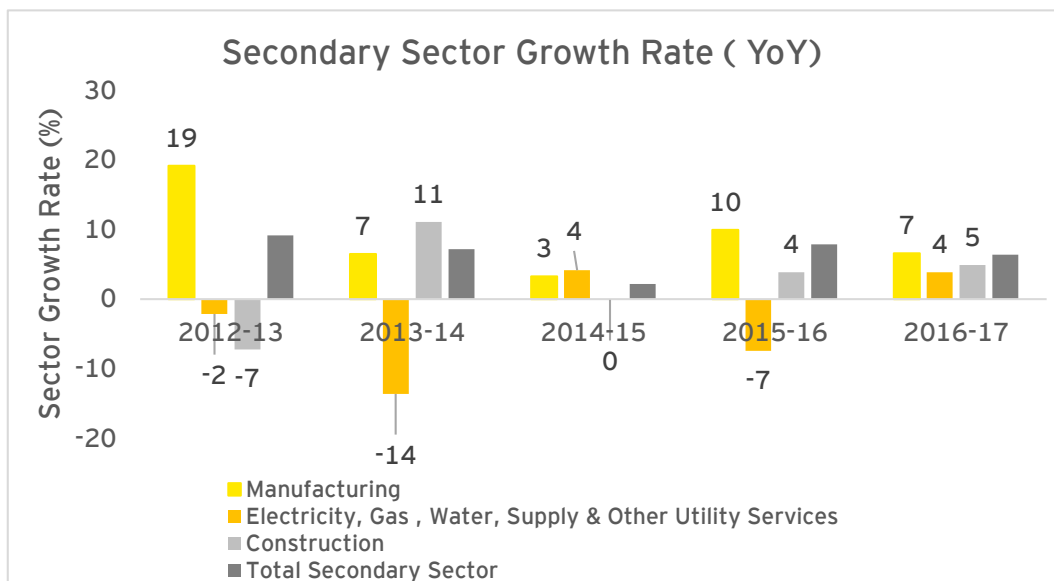
2.1.2 Overview of Haryana's Secondary Sector

Manufacturing is the main component of the secondary sector in Haryana contributing about 69% in GSVA of Secondary Sector followed by the contribution of construction sector at 28%, Electricity, Gas, Water Supply & Other Utility Services at 2% and mining and Quarrying at 1% (2016-17).

The growth rate in terms of gross state value added (GSVA) at constant (2011-12) prices of the secondary sector has been 7% CAGR from 2011-12 to 2016-17. The overall growth of the secondary sector stood at 6.4% with a gross state value added at Rs. 119176.43 crores as in 2016-17.

The growth rate of gross state value added (GSVA) at constant (2011-12) prices has remained consistent, at 9.2% and 7.4% in 2012-13 and 2013-14 while it was 7.9% and 6.5% in 2014-16 and 2016-17 respectively. The growth rate saw a significant dip in growth at 2.2% in 2014-15.

At the sub-sector level, manufacturing as the largest sub-sector witnessed a high growth to the tune of 19.2% in 2012-13, which has declined thereafter (declining to 3.3% in 2014-15). As in 2016-17, manufacturing registered gross state value added to the tune of Rs. 81911.41 at 6.6% growth rate. The figure below, however excludes mining & quarrying data, which due to exorbitant triple digit growth rate (@204% in 2013-14) distorts the figurative growth representation from the other 3 sectors.



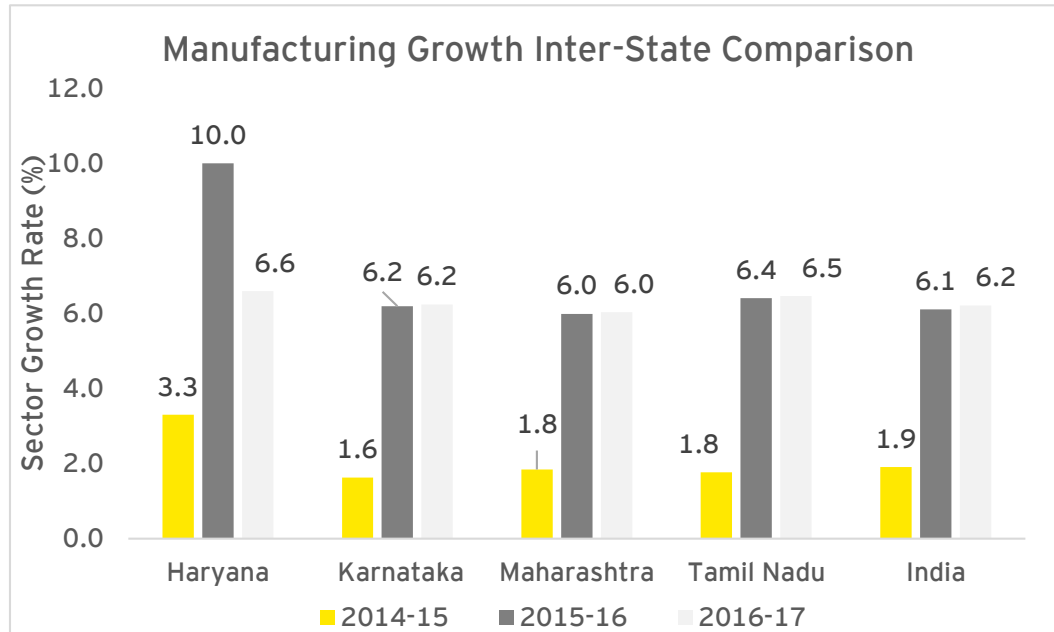
Note: Secondary Sector excluding Mining & Quarrying

Source: Economic Survey of Haryana 2016-14

Figure 5 Secondary Sector Growth Rate (YoY) 2012-13 to 2016-17

With close to 18% share of manufacturing in the total GSDP of Haryana and growing consistently at a CAGR of 7% in the last 5 years, Haryana has emerged as one of the leading manufacturing states in India (higher than all-India average) with the all-India average manufacturing GSDP contribution (around 17-18%) and competing with industrially advanced states like Gujarat (26-28%) and Maharashtra (18-21%).

At the inter-state level, the growth of manufacturing sector in terms of gross value addition, for Haryana, has remained higher than the all-India average consistently from 2014-15 to 2016-17. In terms of inter-state benchmarking, Haryana emerges as a leading state with the three year growth rate averaging around 6.5% followed by Tamil Nadu at 4.9%, Maharashtra at 4.6%, and Karnataka at 4.6%.⁵



Note: Data for states other than Haryana is projection based
Source: Economic Survey of Haryana 2016-17 and Oxford Economics

Figure 6 Manufacturing Growth-Inter-state Comparison 2014-15 to 2016-17

In further leveraging its competitive advantage in terms of strategic location, quality infrastructure as well as large skilled, educated and young workforce and to give a growth impetus to the sector; the state has offered a gamut of incentives to promote rapid industrialization via conducive policies and regulatory environment. The Enterprise Promotion Policy 2015 (EPP 2015) is an assuring step in this regard.

The districts like Gurgaon, Faridabad, Hisar, Karnal, Panipat, Bhiwani form the industrial belt of the State with a concentration of exporting units⁶. Some of the key industrial sectors of the state are automobile manufacturing, food processing, textiles, engineering and electronics. The following chapter (Chapter 3) discusses the focus industrial sectors in detail.

However, heavy concentration of manufacturing in areas surrounding the national capital (mainly Gurgaon and Faridabad) have resulted in pockets of industrialization as opposed to a well dispersed industrial growth throughout the state. This is a key area of concern and several initiatives to promote a regionally balanced growth have been introduced as part of the Haryana EPP 2015.

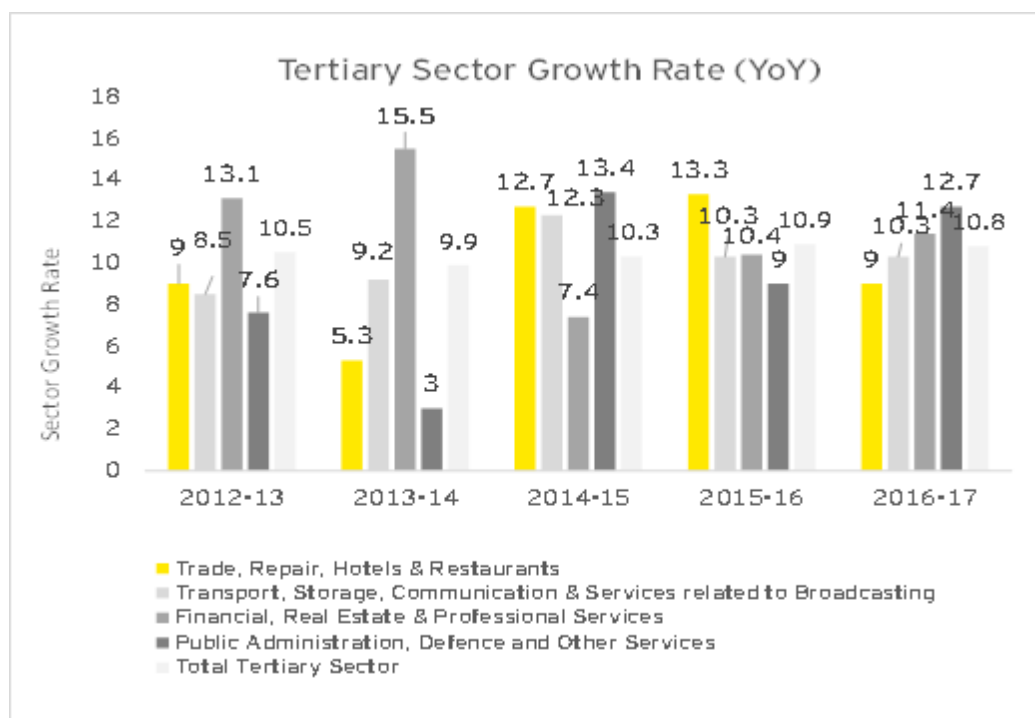
⁵ Haryana Economic Survey 2016-17 and Oxford Economics

⁶ State Industrial Profile, DC-MSME, 2015-16

With a renewed focus been laid on bolstering the state's manufacturing sector with a strong policy and regulatory push, the overall contribution of the industrial sector is expected to increase further towards sustainable industrial transformation in Haryana.

2.1.3 Overview of Haryana's Tertiary Sector

Financial, Real Estate & Professional Services are the main components of Haryana's tertiary sector contributing about 45% in GSVA of Tertiary Sector followed by Trade, Repair, Hotels & Restaurants at 26%, Public Administration, Defence and Other Services at 15% and Transport, Storage, Communication & Services related to Broadcasting at 13% (as in 2016-17)⁷.



Source: Economic Survey of Haryana 2016-17

Figure 7 Tertiary Sector Growth Rate (YoY) 2012-13 to 2016-17

The growth rate in terms of gross state value added (GSVA) at constant (2011-12) prices of the tertiary sector has been 10% CAGR from 2011-12 to 2016-17. The overall growth of the tertiary sector stood at 10.8% with a gross state value added at Rs. 2, 02,336 crores in 2016-17. As a bright spot, Gurgaon is one of the largest hub in India for providing services in IT sector. The state is the third largest exporter of software in the world.

⁷ Haryana Economic Survey 2016-17

2.2 Industrial Ecosystem in Haryana

The state is the process of becoming a favorable investment destination. In a bid to position itself as a leading industrial state, the state has come up with initiatives around creating robust physical infrastructure, expanding industrial infrastructure, attracting large industry players, dedicated investment regions, investor friendly policies and strengthening the MSME ecosystem.

The figure below is a snapshot of the overall strengths of industrial ecosystem in Haryana:



Physical Infrastructure

Road Infrastructure:

- ▶ Total road network of 26,016 km out of which 2,622.48 km constituted by the National Highways and 1,801 km are state highways.
- ▶ Almost 100% connectivity to rural areas with metalled roads.
- ▶ One of India's biggest state road transport undertakings, Haryana Roadways with a fleet of nearly 4,215 buses operating across 12.70 lakh km everyday.
- ▶ 11 national highways passing through Haryana connecting southern, western and eastern India.

Rail Infrastructure:

- ▶ 1,630-km long rail route with Kalka, Kurukshetra, Rohtak, Jind, Hisar, Ambala, Panipat, Gurgaon and Jakhhal as some of the important railway stations.
- ▶ Dedicated freight corridor along the Delhi- Mumbai Industrial Corridor (DMIC) and Amritsar-Kolkata Industrial Corridor. with Jhajjar notified as nodal district.

Air Infrastructure (total of 8 airports) :

- ▶ An international cargo airport and aircraft maintenance hub in Rohtak (proposed in PPP mode with HSIIDC).



Attractive Investment Destination

- ▶ 1670 Large and Medium Enterprises
Total investments : Rs. 49,000 crore
Employment : 3.36 lakhs persons
- ▶ Export of Rs. 68,032.47 crore out of 616 units from all 21 Districts in the year 2013-14.
- ▶ Foreign Direct Investment (FDI) equity inflows worth US\$ 62.15 billion (April 2000 to March 2016)
- ▶ Ranked 6th in the country in attracting the FDI. (Department of Industrial Policy and Promotion)
- ▶ Around 40 top Fortune -100 companies have their production setup and corporate offices in Haryana.
- ▶ Presence of large players like Maruti Udyog Ltd, India's largest passenger car manufacturer, and Hero MotoCorp Ltd, the world's largest manufacturer of two-wheelers.
- ▶ Of the total 250 large and medium OEMs, about 50 are located in Haryana.



Industrial Infrastructure



- ▶ As in 2016, total Public Private Partnership projects (No): 12 (India-1246)
- ▶ No. of operational Special Economic Zones : 7 (India-186)
 - ▶ Total investments in SEZs-4734 crores
 - ▶ Employment in SEZs- 54,726
 - ▶ Area (hectares) of SEZs-56.4
- ▶ World class infrastructure facilities along proposed Kundli-Manesar-Palwal (KMP) global corridor.
- ▶ Global City in Gurgaon with investment potential of Rs. 1 lakh crore.
- ▶ MRTS between Gurgaon and Manesar and Bawal (investment of approx. Rs 20,000 crore).
- ▶ Integrated Multi Modal Logistic Hub with investment of Rs. 5,000 crore in collaboration with DIPP.
- ▶ Palwal is a key warehousing destination.
- ▶ Installed power capacity (in MW) of 8,510.81 (India-304,505.75 MW)
- ▶ No. of wireless subscribers is 21,154,898 (India: 1,033,157,014)
- ▶ No. of internet subscribers 7,460,000 (India: 334,340,000)

Strong MSME Focus



- ▶ 90,000 Micro, small and medium enterprises
Total investment: exceeding Rs.15,000 crore
Employment: more than 8.90 lakh persons
- ▶ Haryana is ranked 9th all India in terms of number of registered units, 13th in terms of employment, 11th in the number of units assisted under PMEGP, 13th in the number of clusters and 17th in vendor development program per MSME.
- ▶ Cluster-based development approach to promote industries such as IT, textiles, food and handloom.
- ▶ High priority under the Haryana EPP 2015.
- ▶ Other initiatives: 2 projects of Tool Rooms/ Technology Centre's being set-up at IMT Rohtak (19.8 acre) and at Industrial Growth Centre Saha (10 acre) with investment of more than Rs. 100 crore in each.
- ▶ Manesar- Bawal Investment Region identified by the Government to be a manufacturing hub.

2.2.1 MSME scenario in the state

Based on turnover data (2010-11)⁸, the four largest industries (MSME based) in Haryana are Automobile, Food & Beverages, Textiles and Metal. Together they contribute to ~70% of the turnover of the industrial sector in Haryana. The following diagram illustrates some of the key attributes of the key sectors including percentage of industrial turnover (in decreasing order), industrial units, employment and key industrial hubs within the state.

Sector	Turnover Contribution (Percentage)	Unit Contribution (Percentage)	Employment Contribution (Percentage)	Industrial Hubs
Automobile	21%	3%	13%	Faridabad, Gurgaon, Manesar
Food and Beverages	19%	9%	8%	Karnal, Kurukshetra, Ambala, Sonipat
Textiles	19%	12%	24%	Panipat, Sonipat, Gurgaon
Metal	11%	25%	13%	Faridabad, Yamuna Nagar, Sonipat, Ambala, Hisar
Rubber & Plastic	5%	4%	4%	Faridabad, Jhajjar, Sonipat, Gurgaon
Non-metallic mineral products	5%	11%	13%	Jhajjar, Sonipat, Rewari
Engineering	4%	9%	6%	Faridabad
Chemicals	3%	4%	3%	Faridabad, Sonipat, Bhiwani, Jhajjar
Electronics	3%	3%	4%	Ambala, Faridabad, Sonipat, Gurgaon
Wood and Wood Products	3%	14%	6%	Yamuna Nagar, Kaithal, Jind, Hisar
Pharmaceutical	1%	1%	1%	Sonipat, Panchkula, Ambala

Figure 8 Important Industrial Sectors and Districts in Haryana

⁸ Mott MacDonald Data- 2010-11

2.3 Business environment

An important component of business climate is the overall policy environment. Therefore, this section focuses on the review the current state of policy environment for industrial development with a special focus on manufacturing, both at the centre and state level.

At the national level, the National Manufacturing Policy 2011 puts forth a vision for the growth of manufacturing sector and high potential sectors need a specific push. The key objectives are:

1. Increase manufacturing sector's annual growth to 12%-14% and raise manufacturing's contribution to GDP to 25% by 2022
2. Create 100 million additional jobs by 2022
3. Develop appropriate skills set among rural migrants and the urban poor to enable inclusive growth, including strengthening of traditional industries.
4. Increase domestic value-added and technological depth in manufacturing
5. Enhance global competitiveness of manufacturing through appropriate policy support
6. Ensure environmental sustainability



Figure 9 National Manufacturing Policy: Key Objectives

The Make in India Initiative, has been launched by the Government of India, to encourage Multinational and domestic companies to manufacture their products in India. The initiative has identified 25 sectors as focus points from output creation, employment generation and skill development point of view. The thrust sector of this manufacturing transformation strategy is aligned with the make in India initiative. After initiation of this programme, in 2015 India emerged as top destination for Foreign Direct Investment surpassing China and the US.

Policy and Regulatory Environment in Haryana:

Realizing the salience of manufacturing and industrial sector, the state government has launched 'Make in India - Made in Haryana' where it requires adoption of a comprehensive approach to assist the MSME sector in becoming globally competitive. Currently, the total number of MSMEs in the state are 92,525. In the last 15 months, the state government has attracted an investment of Rs. 2,297 crore and provided employment to 50,730 people⁹.



Under the policy framework, several schemes have been launched by the Government, both at the Center and at the State level for MSME sector development. The schemes available for the MSME covers all aspects of value chain such as market intelligence, marketing services, modernization, technology up gradation, quality testing etc.

The policy focus in Haryana has been around Industrial development, MSMEs, investment promotion, ease of doing business, entrepreneurship, and promotion of thrust sectors. The overall policy framework environment is represented in the table below:

Table 1 Policy Framework for Industries in Haryana

Policy	Inception Year	Policy Objectives
Enterprise Promotion Policy	2015	▶ Support to the MSME Sector
		▶ Ease of Doing Business
		▶ Enhancing the Competitiveness of the Industry
		▶ Balanced Regional Growth
		▶ Focus sector growth
Draft IT & ESDM Policy	2017	▶ Make IT and ESDM sector as the key enabler of equitable growth
		▶ Make Haryana a clear destination of choice for investments in IT and ESDM sector
		▶ Employment Generation in IT & ESDM Sector
		▶ Increase IT & ESDM Sector contribution in State's GDP
Draft Textile Policy	2017	▶ To promote export of all type of textiles
		▶ To create world class training infrastructure in textile space
		▶ To attract investment in the textile sector
		▶ To generate the employment in the textile sector

Enterprise Promotion Policy 2015: The state government in its Enterprise Promotion Policy 2015 has identified thrust sectors and provided special emphasis on development of MSME

sector. The state government has notified special schemes such as mini cluster development scheme, critical infrastructure scheme, primary food processing etc.

The key objectives from the Haryana Enterprise Promotion Policy 2015 is provided below:

- ▶ Promote the state as preferred destination for investment and start-ups
- ▶ Create employment opportunities by facilitating ease of doing business and cost of doing business
- ▶ Attract investments over ₹ 1 lakh crore and generate more than 4 lakh jobs
- ▶ Increase contribution of secondary sector to the GDP to achieve 32% from 27% in collaboration with GoI's National Manufacturing Policy and Make in India
- ▶ Facilitate State GDP growth rate in excess of 8%
- ▶ To adopt Zero Defect Zero Effect in manufacturing
- ▶ Revamped Quality Marking Centres as quality Certification & Skill development Centres
- ▶ Set up of ₹ 1000 crore fund for CGTMSE Scheme (GoI) for collateral free loans of upto ₹ 1 Crore to MSMEs
- ▶ Use of panchayat lands on lease basis for sheds/flatted factories in Industrial Estates
- ▶ Categorization of Blocks: Identification and Disbursement of India wide best incentive for D Category Blocks (and also in B & C category)
 - *Block A*: industrially developed areas
 - *Block B*: intermediate development
 - *Block C*: industrially backward areas
 - *Block D*: most industrially backward areas
- ▶ Traditional Clusters- Scientific Instruments, metal industry, plywood industry, light engineering and textile)
- ▶ Rural Functional Clusters- Apparel, Footwear and Dairy
- ▶ Thrust /Focus Clusters- Textiles and food processing

The following chapter (Chapter 3) discusses the focus industrial sectors in detail.

Key Policy Highlights:

I. Ease of Doing Business-

- ▶ Single Window Clearance System housed within CMO. All clearances within 2 months
- ▶ E-Biz portal - online clearances & approvals
- ▶ 3rd Party verifications/self-certifications. All Industrial services covered under Industrial Promotion Act and Right to Service Act
- ▶ Streamlined/online mechanism in Town & Country Planning, Urban Local Bodies, Labour, Environment Departments and HSIIDC
- ▶ Two-tier system for project clearances:
 - ▶ Projects with investment more than ₹ 10 Cr and involving CLU cases of more

- ▶ than one acre land to be cleared by Empowered Executive Committee under PSCM
- ▶ Projects with investment up to 10 Cr and CLU cases up to one acre in conforming zones to be cleared by District Level Clearance Committee under Dy. Commissioner
- ▶ Simplified Mechanism for issue of Industrial Licences/ Change of Land Use

II. Institutional Strengthening and Re-Orientation-

- ▶ **Bureau of Industrial Policy and Promotion:** The main objective is policy outreach, continuous engagement with the Industry in an on-going basis and to track investment promotion.
- ▶ **Haryana Enterprise Promotion Board:** The board has been set up for overseeing time bound clearances, sanctioning special packages for mega projects and clearing further policy initiatives with the Governing Council headed by Hon'ble Chief Minister.
- ▶ **Haryana Enterprise Promotion Centre:**
 - ▶ Coordinate with the Govt. to encourage new investment and its actualization in the state in the focussed sectors. ¹⁰
 - ▶ Grants clearances (after approval from HEPB) in cases where all necessary statutory approvals are required. ¹¹
- ▶ **District level Clearance Committee:** The major function of DLCC is to review and monitor the processing of applications by the District Industries centres. DLCC is the final body to grant clearances to setup and Industry.
- ▶ **MSME facilitation Council:** The council chaired by the Director, Department of Industries and Commerce, Haryana deals with issue resolution, policy outreach and facilitation of the MSMEs.

¹⁰ Haryana Industries and Commerce Department notification.

¹¹ Industrial promotion Policy



03

Focus Sectors

3. Focus sectors - National and State Overview

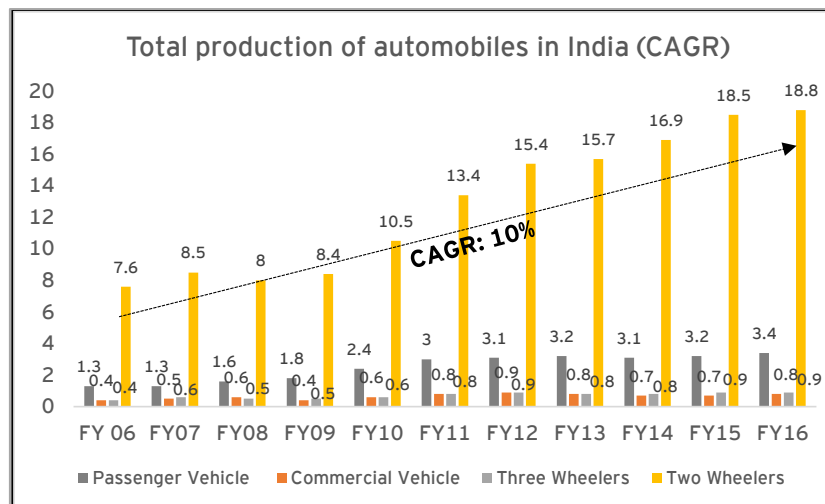
3.1 Major Industrial Sectors and their Overview

In order to understand the industrial potential of Haryana across sectors, an analysis of focus sectors at a national and state level have been undertaken. Major sectors have been identified based on Haryana's State Priorities, as identified in the Enterprise Promotion Policy 2015.

3.1.1 Automobile and Auto Component Manufacturing

India: Key Trends and Growth Headwinds

- ▶ Indian automobile industry accounts for 22% of the country's manufacturing GDP and around 7% of India's GDP and provide employment to about 19 million people. From 2006-2016, the total production grew up at a CAGR of 9.5%.



Source: IBEF Sector Profile 2016

Figure 10 Total Automobile Production in India 2006-07 to 2016-17

- ▶ The passenger vehicle segment has witnessed the fastest growth at a CAGR of 10.09% (3 million units in 2016-17) followed by two-wheeler segment which grew at a CAGR of 9.48% during the same period (18.8 million production as in 2016-17)¹².
- ▶ With an average annual production of 17.5 million vehicles, India is currently the 7th largest automobile producer in the world and its share in global exports having increased by 7 times (2001-2013). By 2016, India is expected to become the 4th largest automotive market by volume.
- ▶ The exports of automobile components, nationally, registered a YoY growth of 16.7% to 61,487 crore (USD 10.04 billion) in 2013-14 and are projected to reach USD 12 billion by FY 15-16 and to USD 30 billion by FY 20-21.
- ▶ Turnover of the Indian automobile component industry in 2012-13 was USD 39.7 billion and is expected to reach USD 115 billion by 2020-21 as per estimates by Automotive Component Manufacturers Association of India (ACMA).

¹² IBEF Sector Report 2017

- ▶ The total FDI in automobile and auto-components at all-India level (2000-2013) was the fourth-largest at Rs. 42,000 crores (approx.) and 400 IEMs with an investment worth Rs. 80,000 crores (approx.) and 114 M&A deals (2008-2013).

With an objective to develop India as a global manufacturing as well as R&D hub, the automobile sector in India is in a bright spot with the strong government push through the policy initiatives like the National Manufacturing Policy 2011, Make in India with a wide array of policy support in the form of sops, tax incentives, ease of doing business and FDI liberalization.

Haryana: The Emerging Automobile Hub

In alignment with the national manufacturing transformation strategy as mentioned above, the automobiles and auto component manufacturing in Haryana has been accorded high priority and identified as a focus sector.


With a total of 1087 automobile industries in the Haryana which comprises 3% of the total industries in the State, the sector employs 45571 people, which is a share of over 11% of the total mapped manpower in the State. The total turnover for the year 2010-2011 stood at Rs. 16526 crore, which was a 15% share of the GSDP.

3% of total industries

Hubs include **Faridabad** and **Gurgaon**

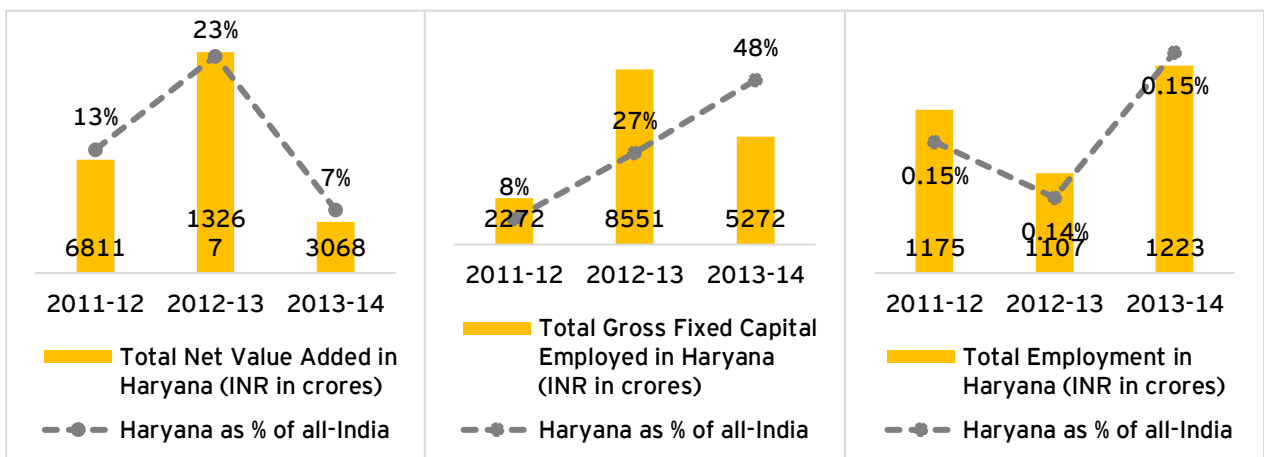
11% of employment

17% of GSDP



With strong automotive hub in Gurgaon (including Manesar) and Faridabad, automobile and auto-component manufacturing related exports from Haryana, which stood at Rs. 4, 71,490 lacs, the overall exports composition of automobiles as % of total exports from the state has averaged 6% from 2013-14 to 2015-16¹³.

The figure below provides details of the net value added, gross fixed capital formation, and employment by the automobile and auto component sector in Haryana as well as the state contribution of the sector to national levels from 2011-12 to 2013-14:



Source: Annual Survey of Industries

Figure 11 Automobile Industry Trends in Haryana

¹³ Haryana Department of Industries and Commerce

Realising the potential of the sector and attract further investments, some of the incentives provided in EPP 2015 package are investment subsidy on VAT @50% - 75%, Interest Subsidy @5%, Power Tariff Subsidy Rs.2 per unit and 50% exemption from EDC.



Enablers

- ▶ Proximity to NCR results in a large potential market base
- ▶ Thriving business destination with the upcoming Delhi-Mumbai Industrial Corridor , Kundli-Manesar and Palwal expressway and the dedicated freight corridor
- ▶ High focus accorded in the Haryana Enterprise Promotion Policy 2015
- ▶ Producer of 2/3rds of the passenger cars, 50% of tractors, 60% of motor cycles
- ▶ Host for many large automotive players like Maruti Udyog, Hero Motocorp and Suzuki. Suzuki in hubs like Gurgaon and Faridabad (as the automobile centres).
- ▶ Maruti Suzuki plants at Gurgaon & Manesar, Honda two-wheeler Plant at Manesar and Hero MotoCorp's motorcycle Plant at Gurgaon/Dharuhera have facilitated anchor-ancillary growth in the state.
- ▶ The International Centre for Automotive Technology (ICAT) has been set-up at Manesar as a part of the National Automotive Testing and Research and Development Infrastructure Project (NATRiP).
- ▶ Huge upstream and downstream supplier opportunities with a potential to boost the light engineering MSME sector.



Disablers

- ▶ Lack of anchor units in areas like Panchkula (mainly areas other Gurgaon and Faridabad), as a result of which anchor-ancillary model of growth is not being set in motion
- ▶ Market competition and stringent OEM cost management provide limited to no opportunity to vendors to increase prices
- ▶ Limited land bank in the state as an impediment to attract investments
- ▶ Lack of tool room facilities in the State and ITIs do not produce quality manpower. Thus there is a skill mismatch
- ▶ Lack of railway siding and logistics facility to facilitate exports
- ▶ Technological capability and R&D competence not enough to match global standards (all-India level): Lacking in design capability in engines, use of newer metals and R&D
- ▶ FTAs signed with other developing countries increasing bulk imports of cheaper auto components
- ▶ Raising capital and scaling capacities
- ▶ High competition from other prominent automobile hubs in India like Pune (Maharashtra) and Chittoor (Andhra Pradesh), Tamil Nadu and vendors in Pune and Indore who supply materials at more competitive prices

3.1.2 Engineering

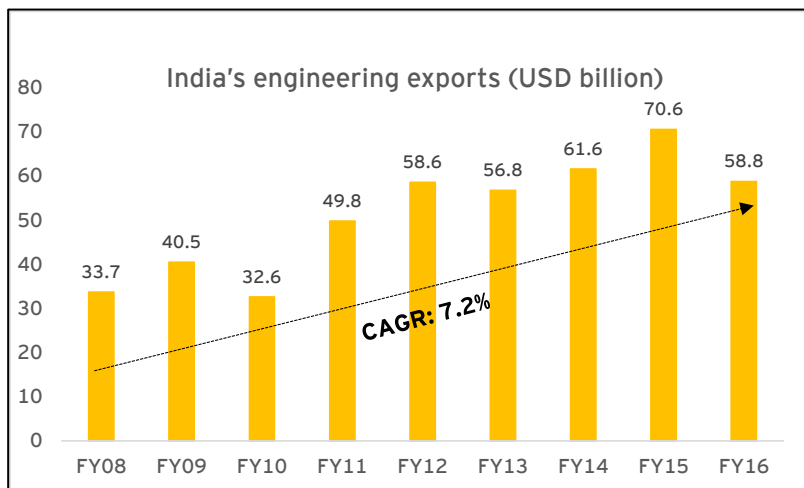
India: Key Trends and Growth Headwinds

- ▶ The heavy engineering industry contributes 12% to the total manufacturing output of India and around 1.8% to the national GDP.
- ▶ The annual turnover of the industry during 2010-11 was US\$ 53 billion and has grown at a CAGR of 14% during the period 2007-11.
- ▶ With an increase in spending on engineering services projected to increase to US\$ 1.1 trillion by 2020¹⁴, the capital goods & engineering turnover in India is expected to reach USD 125.4 billion by FY17.
- ▶ The total FDI in heavy engineering at all-India level (2000-2013) was Rs. 20,000 crores (approx.) and 1500 IEMs with an investment worth Rs. 100,000 crores (approx.) and the 158 M&A deals (2008-2013). This high M&A activity evinces high investor confidence.
- ▶ The heavy engineering segment has a significant import substitution potential of USD 30 billion annually (as in 2013-14) which is expected to reach US\$ 60 billion by 2020,

¹⁴ IBEF - Engineering sector

if the sector continues to grow at a CAGR of 15%, as the fresh investments cycle is initiated.

- ▶ In terms of exports, engineering exports from India stood at USD 58.8 billion in India's engineering exports (USD billion). During FY08-FY16, engineering exports from India registered growth at a CAGR of 7.2%.
- ▶ Engineering exports include transport equipment, capital goods, other machinery/equipment and light engineering products such as castings, forgings and fasteners.
- ▶ The foreign direct investment (FDI) inflows into India's miscellaneous mechanical and engineering industries during April 2000 to March 2016 stood at around USD 3,068.1 million.



Source: IBEF Sector Profile 2017

Figure 12 Total Engineering Exports from India 2008-09 to 2016-17

Like in case of automobile manufacturing, the engineering manufacturing (light and heavy) is a high focus area in Govt's policy agenda with initiatives like National Manufacturing Policy 2011, Make in India. These initiatives offer a wide array of policy support in the form of sops, tax incentives, ease of doing business and FDI liberalization (100 %Foreign Direct Investment).

Haryana: The Engineering Bright Spot

The role of the engineering sector as a whole and the light engineering in particular is very important if the state has to capture the entire value chain of the automobile, aero-space, petro-chemicals, domestic appliances, and paper and textile sectors. This sector has the potential to provide the supply chain to the other thrust area sector, particularly aerospace and defence manufacturing.

There are 3202 engineering industries in the Haryana, comprising 8.5% of the total industries in the State. The sector employs 23991 people, which is a share of over 6% of the total mapped manpower in the State. Turnover for the year 2010-2011 stood at Rs. 3814 crore, which was a 4% share of the GSDP. Faridabad is a key engineering hub in the State, and the sector also has engineering clusters in Rewari, Gurgaon, Panchkula, Palwal, Yamunanagar and Rohtak.

8.5% of total industries

Hubs include Faridabad

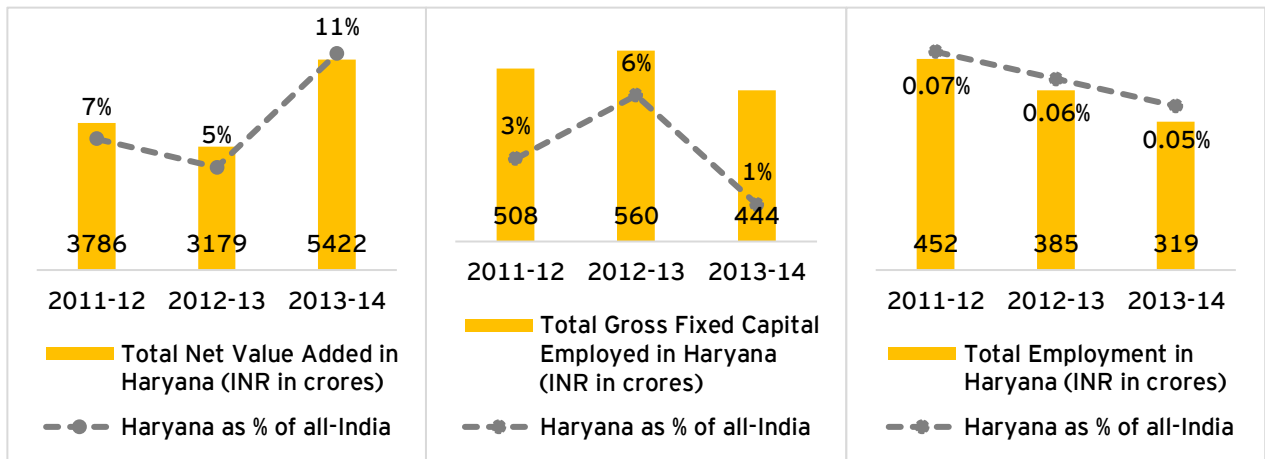
6% of employment

4% of GSDP



The total engineering exports (including agri. implements, machinery & tools and precision eng.) stood at Rs. 1, 29,095 lacs as in 2015-16. The overall exports composition of engineering goods as a % of total exports from the state has averaged 6% from 2013-14 to 2015-16¹⁵.

The figure below provides details of the net value added, gross fixed capital formation, and employment by the engineering sector in Haryana as well as the state contribution of the sector to national levels from 2011-12 to 2013-14:



Source: Annual Survey of Industries

Figure 13 Engineering Industry Trends in Haryana

¹⁵ Department of Industries and Commerce, Haryana



Enablers

- ▶ Special focus on engineering industry-Scientific Instruments, light engineering as traditional clusters in Haryana EPP 2015.
- ▶ Proximity to NCR resulting in large potential market base.
- ▶ Thriving business destination with the upcoming Delhi-Mumbai Industrial Corridor, Kundli-Manesar and Palwal expressway and the dedicated freight corridor.
- ▶ Integrated Multi Modal Logistic Hub with proposed investment of INR 5,000 crore.
- ▶ Rapid increase in infrastructure investment , industrial production and demand for electrical and construction equipment.
- ▶ Capacity creation in sectors such as infrastructure, power, mining, oil & gas, refinery, steel, automotive, and consumer durables driving demand in the engineering sector.
- ▶ Possibility of tapping multiple export destinations (in case of India)-US, Europe, Japan and South Korea, Sri Lanka and Bangladesh.

Disablers

- ▶ Slowdown in exports specifically over the last 1 year.
- ▶ Lack of tool room facilities and railway siding and logistics facility to facilitate exports.
- ▶ Rise in Chinese imports and import of second hand machinery.
- ▶ Low capital formation and massive capacity underutilization.
- ▶ High competition from states like Maharashtra and Tamil Nadu.
- ▶ Signing of FTAs/PTAs with our neighbouring countries.
- ▶ Inverted duty structure/ low duty regime which is turning the manufacturers into traders.
- ▶ Limited land bank in the state as an impediment to attract fresh investments.
- ▶ Absence of constant technology upgradation, productivity improvement, skill development, and marketing support.

3.1.3 Agro and Food Processing

India: Key Trends and Growth Headwinds

- ▶ India is the 6th largest food and grocery market in the world, with retail contributing 70 % of the sales.
- ▶ Food processing is also one of the largest industries in India, ranked 5th in terms of production, consumption, export and expected growth.
- ▶ 14% contribution to Manufacturing Gross Domestic Product (GDP), 13% to India's exports and 6% to industrial investment.
- ▶ 13% of the total employment in all registered factory sector is in this sector.
- ▶ Food retail segment valued at USD 490 billion (2013) expected to reach Rs. 61 lakh crore (USD 894.98 billion) by 2020. Overall, food industry valued at USD 39.71 billion in 2013, expected to grow at 11% CAGR to USD 65.4 billion by 2018.
- ▶ The food processing sector doubled its share among total Indian exports between 2001 and 2013; exports grew at a compound annual growth rate (CAGR) of 17%.
- ▶ Value of exports in the sector has been showing an increasing trend with Average Annual Growth Rate (AAGR) of 20.53% for five years ending 2013-14. The value of processed food exports during 2013-14 (provisional results) was of the order of US\$ 37.79 Billion (total exports USD 312 Billion) constituting 12.1% of India's total exports.

- ▶ With India ranked amongst the top 15 total agricultural exporter in the world, the total exports from India grew at a CAGR of 23% over FY11-15 to reach USD 21.5 billion in FY15. As in 2016, it stood at USD 32 billion.
- ▶ 1800 IEMs with an investment worth INR 100,000 crores (approx.) and 169 M&A deals (2008-2013). This high M&A activity evinces high investor confidence.

Food processing has been recognised as a priority sector in the new manufacturing policy in 2011 and a special fund called "Food Processing Fund" of approximately USD 300 million (at Rs. 67.25 to 1 USD) has been set up in National Bank for Agriculture and Rural Development (NABARD) for extending affordable credit to designated food parks and the individual food processing units in the designated food parks. The Reserve Bank of India has also classified loan to food & agro-based processing units and Cold Chain under agriculture activities for Priority Sector Lending (PSL). Further the sector has received a fillip through the Make in India initiative and 100 % Foreign Direct Investment that has been allowed under automatic route in storage and warehousing including cold storages.

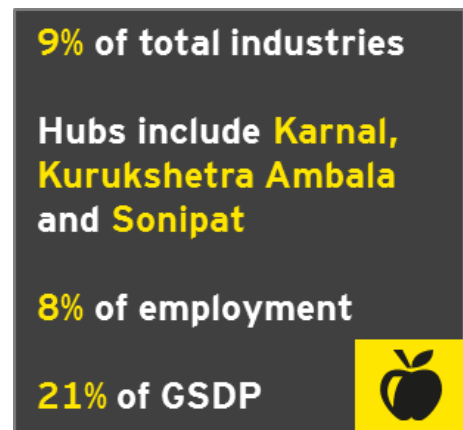
Haryana: The Agriculture Advantage

Haryana has a robust agriculture sector and has achieved self-sustainability status in food and milk production. The State enjoys the locational advantage of its proximity to one of the largest consumer market of NCR. Agriculture is one of the biggest employment generators in rural Haryana with strong potential in value addition and exports.

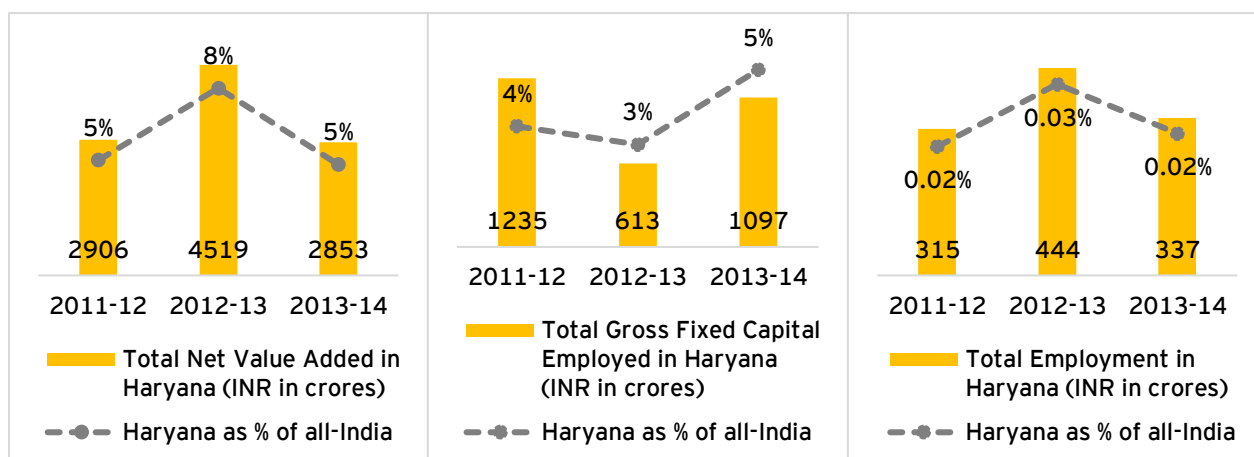
The food and beverages sector has 3272 industries, comprising 9% of the industries in the State. The sector employs 32426 people, comprising over 8% of the manpower in the state. Turnover in 2010-11 was valued at Rs. 19752 crores, which was 21% of the GSDP. Key locations where the sector is prominent include Karnal, Kurukshetra, Ambala and Sonipat.

The total agriculture food processing exports (pickle and guar gum) stood at Rs. 57,258 lacs as in 2015-16. The overall exports composition of food processing as a % of total exports from the state has averaged close to 3% from 2013-14 to 2015-16¹⁶ (only including pickles and guar gum). Guar gum is a key processed agriculture based commodity from Haryana. The State Government has provided sector specific incentives which can be availed as per the Haryana EPP 2015.

The figure below provides details of the net value added, gross fixed capital formation, and employment by the agro and food processing sector in Haryana as well as the state contribution of the sector to national levels from 2011-12 to 2013-14:



¹⁶ Department of Industries and Commerce, Haryana



Source: Annual Survey of Industries

Figure 14 Agro & Food Processing Industry Trends in Haryana



Enablers

- ▶ Special focus on food processing as a Thrust Sector in Haryana EPP 2015.
- ▶ Proximity to NCR results in a large potential consumer market base
- ▶ Second largest food grains producer in the country and also the second-largest contributor of food grains to India's central pool
- ▶ Highest producer of Basmati rice in the country. More than 60% Basmati rice exported from the country being from Haryana alone.
- ▶ Mega Food Park at Barhi (proposed) as per Haryana EPP 2015.
- ▶ Food Parks at Rai (Sonapat) and Saha (Ambala) developed and maintained by HSIIDC and 5 cold chain projects being implemented (MoFPI).
- ▶ Presence of reputed organizations like National Dairy Research Institute, Karnal.



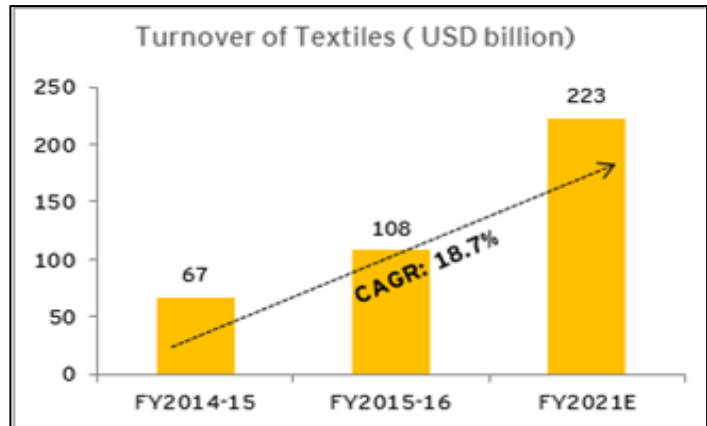
Disablers

- ▶ Limited land bank in the state as an impediment to attract fresh investments.
- ▶ Highly fragmented-few large scale international players and multitude of small-scale players and cottage industries with technologically outdated plants.
- ▶ No APEDA notified Agri Export Zones in the state
- ▶ Lack of trained manpower and low labour productivity
- ▶ Impact of seasonality resulting in supply related issues
- ▶ Increased cost based competition from Punjab, Karnataka and UP and price pressures
- ▶ Absence of farm-level infrastructure for measurement, testing, immediate chilling and storage either results in sale in local markets, reducing marketable surpluses or product wastage.
- ▶ Dearth of food parks with required infrastructure (cold storage / godown facilities) and sector specific common facility centres
- ▶ Karnal, Sonapat, Kurukshetra region is one the major agricultural belt in the state. However, the infrastructure facilities such as testing labs for dairy, bakery and other food processing products available in the region are minimal.
- ▶ Limited cold-chain infrastructure also increases supply chain waste and reduce quality and nutritional levels.

3.1.4 Textiles and Apparels

India: Key Trends and Growth Headwinds

- ▶ Textile sector plays a key role in the India's economy with a contribution of 14 % to industrial production, 4% to GDP and 13% to export earnings and high employment potential employing 4.5 crore persons directly.
- ▶ The country is the world's 2nd largest producer of textiles and garments and the textile industry accounts for about 20 % of the world's spindle capacity and 8 % of global rotor capacity.



Source: Department of Industries and Commerce, Haryana

Figure 15 Textiles and Apparels Turnover in India

- ▶ The Indian textile industry is currently estimated at around USD 108 billion, and the total textile turnover from textiles and apparel industry is expected to reach USD 223 billion by 2021.
- ▶ The industry is a major contributor to India's exports with India having a 5.2% share in global textiles exports, growing at a CAGR of 12% in 2001-2013. Exports in textiles and apparel from India are expected to increase to Rs. 3, 90,000 crores by 2016-17 from Rs. 2, 40, 000 crores in 2013-14¹⁷.
- ▶ The total FDI in textiles and apparels sector at an all-India level (2000-2013) was Rs. 5000 crores (approx.)
- ▶ 2000 IEMs with an investment worth Rs. 200,000 crores and 245 M&A deals (2008-2013). This high M& A activity evinces high investor confidence¹⁸.

The growth in the sector has been catalysed by the strong government support with the policy framework- *National Textile Policy (2000)* and the planned budgetary support. In the 12th Five Year Plan, the planned Government budgetary support to textiles has been to the tune of USD 4.25 billion against USD 4.18 billion in the 11th Five Year Plan. Also Huge investments are being made by Government under Scheme for Integrated Textile Parks (SITP)- (USD184.98 million) and Technology Upgradation Fund Scheme (TUFS)- (term loan sanctioned in Feb, 2015- USD2198.45 million) to encourage more private equity and to train workforce. In addition to this, under Union Budget 2015-16, government has allocated USD39.81 million for integrated parks in India.

¹⁷ IBEF Sector Profile 2017

¹⁸ Asian Development Bank Report on VICIC

Haryana: Textiles and Apparel- Unleashing Potential

Blessed with a resource advantage with Haryana as one of the largest producers of cotton in Northern India. Haryana is one of the leading producer of textiles and readymade garments.


Panipat is famous for handloom products, furnishing fabrics, terry-towels and blankets. Also, Gurgaon has emerged as hub for manufacturing of Readymade Garments. Some of the largest manufacturers of Readymade Garments in Asia are having their manufacturing facilities in Gurgaon.

12% of total industries

Hubs include Panipat, Sonipat and Gurgaon

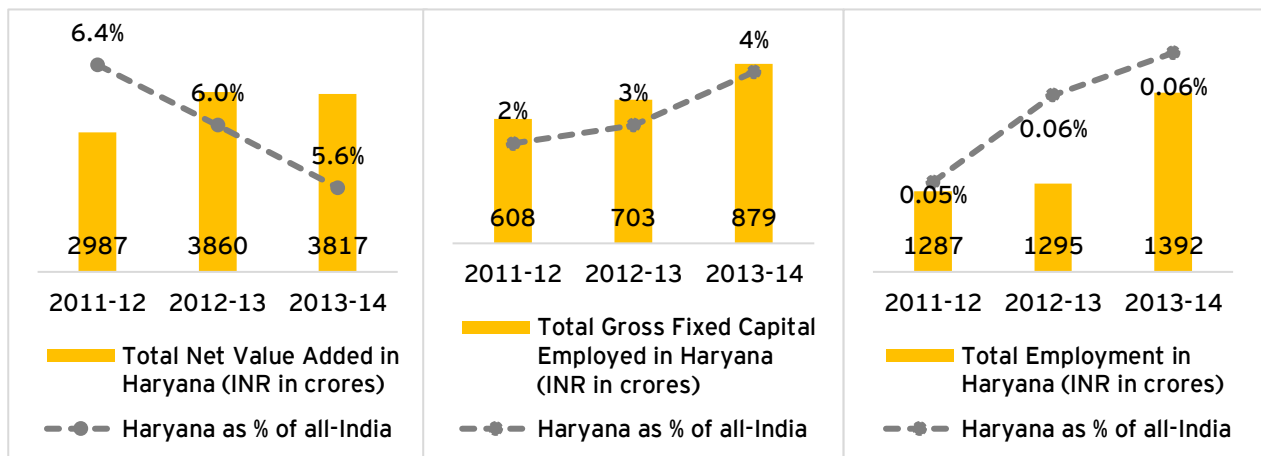
24% of employment

20% of GSDP



The numbers of industries under this sector stand at more than 4624 units. The sector employs more than 98518 people which is a share of more than 12% of the total mapped manpower in the state. The total textiles and apparels exports (handloom and readymade goods) stood at Rs. 88, 70,42 lacs as in 2015-16. The overall exports composition of textiles and readymade garments (including handlooms) as a % of total exports from the state has averaged close to 10% from 2013-14 to 2015-16. Clearly, textiles and readymade garments is a leading export oriented sector of the state¹⁹.

The figure below provides details of the net value added, gross fixed capital formation, and employment by the textiles and apparel sector in Haryana as well as the state contribution of the sector to national levels from 2011-12 to 2013-14:



Source: Annual Survey of Industries

Figure 16 Textiles and Apparel Industry Trends in Haryana

The draft Textile Policy 2017 for the state is targeting an investment of Rs. 5000 crore in the sector, creation of 50,000 new jobs and CAGR of 20% during the policy period.

¹⁹ Department of Industry and Commerce, Haryana



Enablers

- ▶ Special focus on textiles as a thrust sector in Haryana EPP 2015.
- ▶ Raw material abundance with Haryana as the leading cotton manufacturer in India.
- ▶ As per the Draft Textile Policy 2017- International Quality Testing Centre at Panipat, Silver Plant, Centre of Excellence for Textile at Bhiwani.
- ▶ As per Haryana EPP 2015, plan to promote Sirsa as a textile hub with a Textile Park to be set up in Haryana and an Incubation Centre for skill development of the youth associated with the textile sector.
- ▶ Integrated Textile Park at Panipat (approved by GoI).
- ▶ An International Trade and Convention Centre being developed at Panipat to promote handloom products.
- ▶ Gurgaon as a leading readymade garments hub in Asia with 33+ leading global manufacturing companies in apparels manufacturing.



Disablers

- ▶ Small scale units with lack of sophisticated technology and R&D.
- ▶ Absence of a dedicated market despite Haryana being of the largest cotton producer. As a result, heavy expenses incurred on transportation of goods from Haryana to Punjab, Gujarat or other states.
- ▶ Barely 3 textiles units in Hisar (over 50 textile units in Punjab)*.
- ▶ Lack of successful penetration in high value products e.g. Technical textile.
- ▶ Lack of a dedicated "state-brand" in carpets manufacturing despite a strong foothold of carpet manufacturing in the state.
- ▶ Low profit margins to carpet manufacturers as most of the profits being taken up by the exporters with lack of incentives to expand.
- ▶ The textile units majorly exist in Panipat, Gurgaon and Hisar. However, it is observed that the textile packaging industry is under developed. There is scope for development of this industry.
- ▶ Development of integrated textile units which are being setup under various schemes such as SITP, has reduced scope for MSE units in areas like dyeing, stitching etc.
- ▶ Textile related competition from states like Rajasthan, Karnataka, Gujarat and Maharashtra.

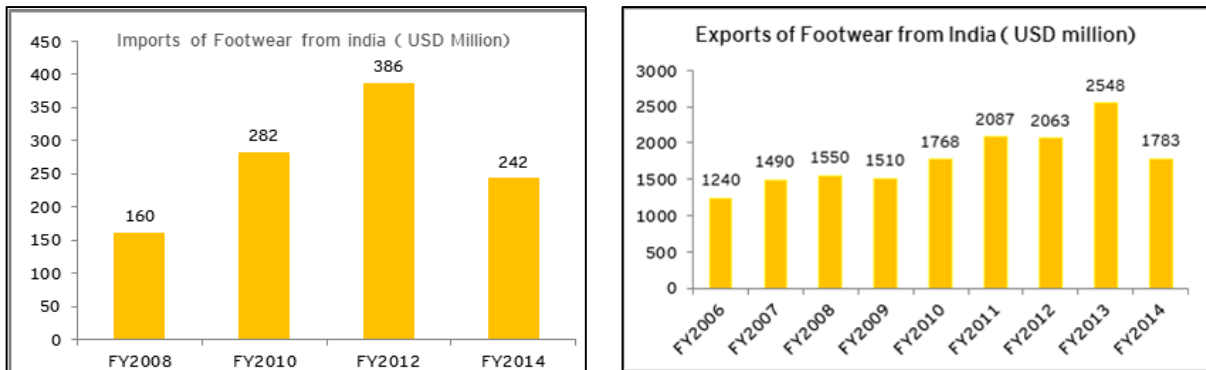
3.1.5 Footwear and Accessories

India: Key Trends and Growth Headwinds

- ▶ India is the second largest producer of footwear and leather garments in the world²⁰.
- ▶ Indian leather sector stands at USD 17.85 billion (exports - USD 5.85 billion, Domestic Market - USD 12 billion).
- ▶ India accounts for 12.93% of the world's leather production of hides/skins.
- ▶ Indian leather industry has one of the youngest workforce with 55% of workforce below 35 years of age.
- ▶ India accounts for 9% of the global annual production of 22 billion pairs, as compared to China's share of more than 60%.
- ▶ With an annual production of 2.1 billion pairs of shoes, of which nearly 90% are consumed internally, while the remaining are exported primarily to European nations. Therefore India's share in the global export market is 1.9% in value terms, making it much lower than the leading producer China, which shares 40% of the global market.

²⁰ Make in India Website

- ▶ Total footwear exports from India stood at USD million 1783 as in 2014-15 and imports stood at USD 242 million in 2014-15²¹.



Source: IBEF Sector Profile 2017

Figure 17 Total Footwear Imports and Exports from India

Govt has offered incentives and sops under initiatives such as the Integrated Development of Leather Sector (IDLS) sub-scheme implemented as part of the ILDP aiming at capacity modernisation and technological upgradation of the leather sector. Some of the notable incentives are: no central excise duty on footwear with retail price upto USD 7.69, concessional excise duty of 6% for all footwear with retail price above USD 7.69 and USD 15.38 and reduction in excise duty on footwear with leather uppers and having retail price more than USD 15.38 reduced from 12% to 6%²².

Overall, The National Manufacturing Policy and the Make in India identifies leather as a focus sector for growth and employment generation.

Haryana: Growth Prospects of Footwear and Accessories

The footwear industry in Haryana is poised for exponential growth as majority of manufacturing units are located in the state. The growth potential of the footwear sector is expected to be 20% CAGR for the next 25 years, considering the domestic demand for the rising population base of 125 crores, creating huge potential for exports. Karnal has been the centre/hub of footwear production since 1966 and is currently employing about 50,000 workers (direct and indirect). The footwear sector is labour intensive and provides gainful employment in the State.

Significantly, this sector comprises of micro and small enterprises (MSE) units. The non-leather footwear segment largely targets domestic demand and the leather segment is export oriented. The total leather based exports from the state stood at Rs. 75, 098 lacs as in 2015-16. The overall exports composition of leather based exports as a % of total exports from the state has averaged close to 1% from 2013-14 to 2015-16²³.

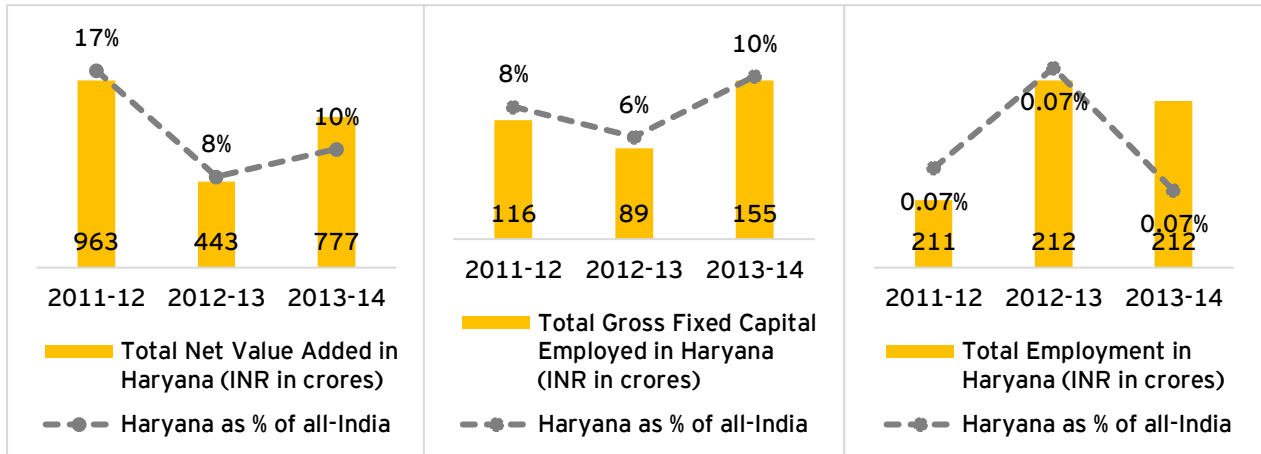
²¹ IBEF Sector Profile 2017

²² Make in India website

²³ Department of Industry and Commerce, Haryana

To provide a fillip to the footwear sector in the state, special incentives have been provided in the Haryana EPP 2015.

The figure below provides details of the net value added, gross fixed capital formation, and employment by the footwear and accessories sector in Haryana as well as the state contribution of the sector to national levels from 2011-12 to 2013-14:



Source: Annual Survey of Industries

Figure 18 Footwear and Accessories Industry Trends in Haryana



Enablers

- ▶ Special focus on footwear sector as a rural functional cluster in Haryana EPP 2015.
- ▶ Raw material abundance with Haryana as a leading leather manufacturer in India.
- ▶ Proximity to NCR results in a large potential consumer market base (60% of Haryana's geographic area falling in the NCR).
- ▶ Presence of major brands/companies like Liberty, Action, Relaxo, Lancer, Today, Columbus, Aeroback.
- ▶ High demand with the per capita consumption of footwear in India projected to increase upto 4 pairs and total domestic consumption is expected to reach upto 5 billion pairs by 2020.
- ▶ Plans to set up Mini Leather Cluster-IMT Rajkot, Mewat, Haryana (Make in India).
- ▶ Concentration of non-leather footwear units in Bahadurgarh and Karnal city has the hub of footwear
- ▶ As per EPP 2015, Common Facility Centre (CFC) is being set up under MSE-CDP scheme of GOI and footwear fashion, research & development and Footwear Technology Institute at Karnal



Disablers

- ▶ Highly fragmented with almost 15000 small and medium enterprises operating largely in the unorganized segment.
- ▶ Limited scope of mobilizing funds through private equity and bank loans due to unorganized nature of holdings.
- ▶ A limited presence in the organized segment and high competitive intensity between the two segments with both estimated to have an equal share of the overall domestic market in value terms.
- ▶ Lack of awareness of international quality standards by many players
- ▶ Lack of product innovation and focus on modernizing designs and styles by smaller units.
- ▶ Most of the units work on sub-contract basis where all the design and other specification of the product are provided by the buyer.
- ▶ Competition from states like Uttar Pradesh with Agra as the leading footwear manufacturer followed by Saharanpur and Kanpur.

3.1.6 Aerospace and Defence Manufacturing

India: Key Trends and Growth Headwinds

- ▶ Global defence and aerospace market is currently estimated to be worth over USD 800 billion in the aerospace segment in India, which includes both civilian and defence segment.
- ▶ Expected investments in defence and aerospace segment in India, to the tune of USD 50 billion and expected USD 250 billion worth defence equipment procurement by India in the next decade.
- ▶ 60% of defense related requirements are met by imports which offers a huge opportunity for import substitution.
- ▶ Contractual offset obligations worth approximately USD 4.53 billion in next 5-6 years²⁴
- ▶ The offset policy (which stipulates the mandatory offset requirement of a minimum 30% for procurement of defence equipment in excess of USD 306.69 million) introduced in the capital purchase agreements with foreign defence players. This will ensure an eco-system of suppliers to be built domestically.
- ▶ 100% FDI in defence sector with upto 49% under automatic route and FDI above 49% through Government route which is likely to result in access to modern technology.

In addition to the Make in India initiative, the growth in the sector has been catalysed by the strong government support with the policy framework- Defence Production Policy, 2011 to encourage indigenous manufacturing of defence equipment with an amendment in the Defence Procurement Procedure (DPP) in 2016. The MAKE procedure, which aims to promote research & development in the industry with support from the government and the placement of orders, has been promulgated with provision for 90% funding by Government and preference to MSMEs in certain category of projects²⁵.

Haryana: Aerospace and Defence Manufacturing- The Big Leap

The state government has identified this sector as a focus sector for the state with a set of initiatives in the Haryana EPP 2015 such as offering land sites in the state, suitable for locating defence production industry in public and private sectors in line with the National Defence Production Policy. High on state's agenda, will be to attract foreign direct investment in defence production sector for establishing industrial units in the state for production of defence equipment, including weapons / ammunition / platforms and systems.

Also special incentives have been proposed for creation of mega projects / mother units in aerospace and defence sectors at par with maximum incentives proposed for any sector and any category of the industry.

²⁴ Make in India Website

²⁵ Make in India website

*- <http://economictimes.indiatimes.com/news/defence/haryana-bets-big-on-aerospace-defence-sectors-cm-manohar-lal-khattar/articleshow/50936054.cms>



Enablers

- ▶ Special focus on aerospace and defence manufacturing in Haryana EPP 2015.
- ▶ Plans for prioritized land allocation for aerospace industry and defence sectors to the tune of earmarking 27,000 hectares of land.*
- ▶ Allocation of 4,000 acres in Hisar District for maintenance, repair and overhaul in the aerospace sector.
- ▶ Plans to roll out sector specific policy on aerospace and defence manufacturing.
- ▶ Presence of a strong anchor-ancillary base to locate defence production:
 - ❑ Bharat Electronics Limited , Panchkula undertaking supplies military communication systems to the armed forces.
 - ❑ DRDO, Panchkula
 - ❑ Yamunanagar supplying ammunition boxes to the Armed Forces.
 - ❑ Gurgaon and Faridabad have strong base in engineering, secondary metal processing industry manufacturing various types of alloys, automobile and auto components industry, and other related ancillary industries.
- ▶ As per Haryana EPP 2015, existing airstrip at Hisar to be developed as an Aviation Hub which will include setting up of a Maintenance Repair and Overhaul (MRO), Fixed Base Operations (FBO) and Aerospace & defence manufacturing facility.



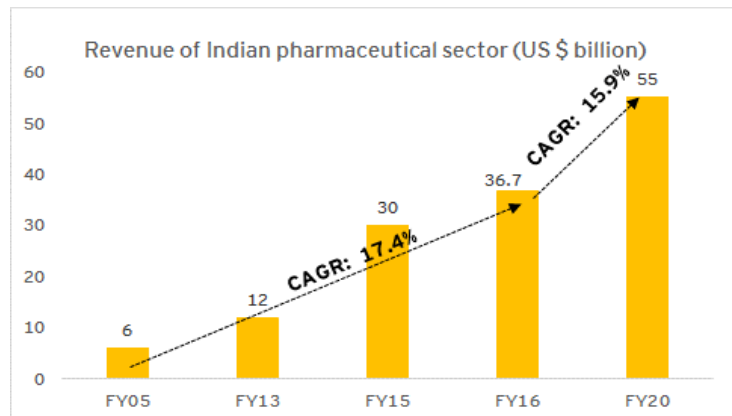
Disablers

- ▶ Competition from leading aerospace and defence manufacturing states like Madhya Pradesh, Karnataka and Odisha with states like Madhya Pradesh having a dedicated sector policy on aerospace and defence manufacturing.
- ▶ Many MSEs that have an established technological base are reluctant to enter the defence market.
- ▶ MSEs have a small capital base and generally require immediate cash payment. They cannot withstand payment delays, which are inherent in government accounting and audit procedures and do not like to deal with the Controller of Defence Accounts.
- ▶ Lack of a high skilled talent pool- technically and managerially to the meet the technical requirement of this sector.
- ▶ Procurement agencies such as DGOF, DPSU, DRDO and DGOS etc., follow their own vendor-registration process. There is no single source database available. The process for vendor empanelment in defence sector is lengthy and tedious.
- ▶ Rigorous set of approvals and clearances required for product qualification which are time consuming for smaller enterprises/units. This results in loosing of interest in further production.
- ▶ Limited land bank in the state as an impediment to attract investments.
- ▶ Raising capital and scaling capacities.

3.1.7 Pharmaceutical and chemicals

India: Key Trends and Growth Headwinds

- ▶ The Indian pharmaceuticals market increased at a CAGR of 17.46 % during 2005-16 with the market increasing from USD 6 billion in 2005 to USD 36.7 billion in 2016 and is expected to expand at a CAGR of 15.9% to USD 55 billion by 2020.
- ▶ By 2020, India is likely to be among the top three pharmaceutical markets by incremental growth
- ▶ India increased its share of exports in the pharmaceutical sector 2.7 times between 2001 and 2012 at a CAGR of 21%.
- ▶ The total FDI in pharmaceutical sector at all-India level (2000-2013) was Rs. 60,000 crores (approx.) and 1200 IEMs with an investment worth INR 100,000 crores (approx.) and 188 M&A deals (2008-2013). This high M&A activity evinces high investor confidence.



Source: IBEF Sector Profile 2017

Figure 19 Total Revenue from Indian Pharmaceutical Sector

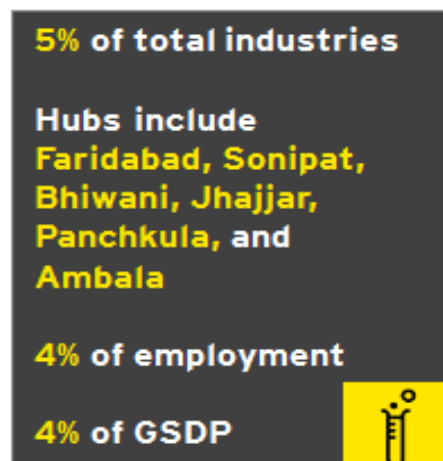
- ▶ Export earning potential: With a major share of 3.5% of total exports from India and a significant export earning potential of USD 11.5 billion annually (as in 2014-15) which can double to USD 20 billion (approx.) , if pharmaceutical exports from India continue to grow at a CAGR of 21%.
- ▶ 70% of the nation's demand for drugs and formulations is met by the domestic pharma industry. About 250 large and 8000 MSMEs dominate this sector in India. The sector also accounts for 20% of the global exports in generics, making it the largest provider of generic medicines globally.
- ▶ The chemical industry in India is a key constituent of Indian economy, accounting for about 2% of GDP. The sector contributes 9% of India's exports, and CAGR of revenue from the chemical sector was 13% from 2008-2013.
- ▶ India's imports in the chemicals and petrochemicals sector account for about 50% of its total imports, hence the sector has a significant import substitution potential.
- ▶ Domestic market for chemicals is expected to grow more than 10% per year in the medium-term (next 5-10 years)
- ▶ India is the 7th largest producer of chemicals worldwide and 3rd largest producer in Asia.
- ▶ At present, India is the net importer of chemicals. The percentage share of the net import of chemicals & petrochemicals in the total national net imports increased from 1.9% to 7.6% during FY07 and FY14. CAGR increase in chemical imports stood at 19.8% and chemical exports CAGR was 16.9%.

The government has been taking various measures to provide fillip to the pharmaceutical and chemical sector. Following the introduction of product patents, several multinational companies are expected to launch patented drugs in India. Centres of Excellence are also being proposed in the country for research in the Petrochemicals Sector. Additionally, augmenting existing testing centres is proposed, to act as certifying agencies for testing plastic products and raw material to meet Bureau of Indian Standards. The Government of India is working towards formulating the National Chemical Policy to accelerate manufacturing in the Chemical sector.

Haryana: Pharmaceutical and Chemical Industry as the Growth Engine

The Pharmaceutical industry has vast growth potential in the country, and Haryana recognizes the need for development of the sector on a sustainable basis. In this regard, the pharmaceutical and chemical industry has been identified as a priority sector as per the Haryana EPP 2015.

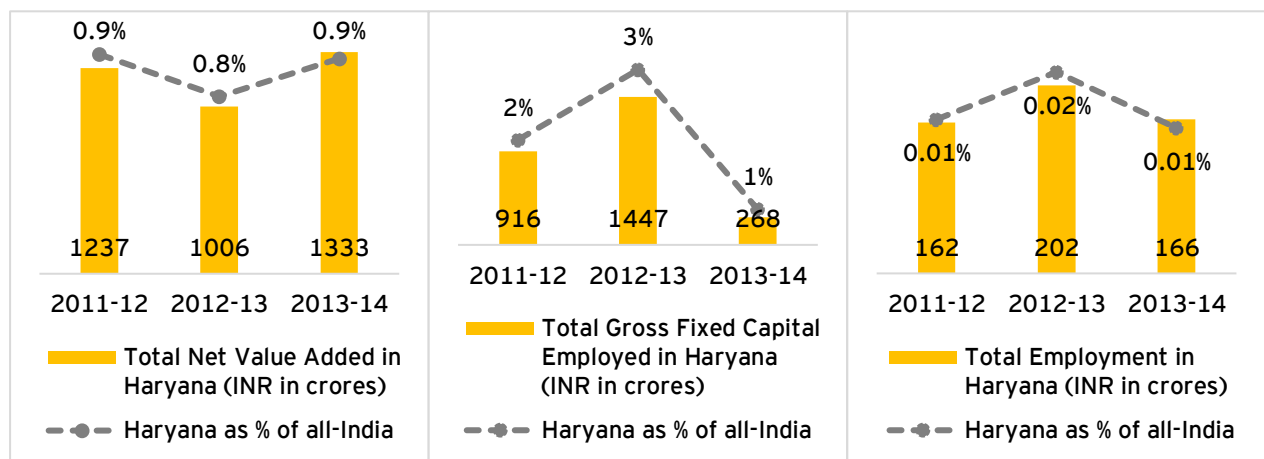
Chemical and Chemical products are one of the major industries in Haryana. The state has more than 45000 working factories producing chemicals and chemical products. The sector registered a growth of 2% in 2013-14 and about 5% in 2014-15.



There are 1479 industries in the chemical sector in Haryana, employing 10,773 people (3% of the workforce). The sector had a turnover of Rs. 3660 crore in 2010-11, comprising 3% of the GSDP. Key hubs include Faridabad, Sonipat, Bhiwani and Jhajjar. The pharmaceutical sector has 444 industries in Haryana, employing 4600 people with a turnover of Rs. 1013 crore. Key hubs include Sonipat, Panchkula and Ambala.

With chemical and pharmaceutical hubs in Faridabad, Sonipat, Jhajjar, Panchkula and Ambala, the sectors related exports from Haryana, which stood at Rs. 158442 lakhs, comprised 2% of the exports from the State in 2015-16²⁶.

The figure below provides details of the net value added, gross fixed capital formation, and employment by the pharmaceutical and chemical sector in Haryana as well as the state contribution of the sector to national levels from 2011-12 to 2013-14:



Source: Annual Survey of Industries

Figure 20 Pharmaceutical and Chemical Industry Trends in Haryana

To further tap the available potential, the State proposed various incentives for the sector under the Haryana EPP 2015. The State would explore the possibility of setting up a pharmaceutical plant. In addition, the raw-material from the Indian Oil Refinery at Panipat offers a great scope for development of the downstream industries for which a petrochemical hub/ plastic parks would be developed.

Incentives such as investment subsidy on VAT @50% - 75%, Interest Subsidy @5%, Power Tariff Subsidy Rs.2 per unit and 50% exemption from EDC will be available to these sectors.

²⁶ Department of Industries and Commerce, Haryana



Enablers

- ▶ Special focus on Pharmaceutical and Chemical Industry as a Thrust Sector in Haryana EPP 2015.
- ▶ Proximity to NCR results in a large potential consumer market base
- ▶ Presence of Panipat Refinery with an integrated petrochemical complex with capacity of the plant has been augmented to 15MMTPA and can handle both indigenous and imported crude
- ▶ Petro-chemical hub and an upcoming Plastic Park in vicinity of Indian Oil Corporation Refinery at Panipat
- ▶ Growth of middle class in India opens a huge market for lifestyle drugs
- ▶ Low cost manufacturing of drugs in India, at 40% to 50% of the cost to the rest of the world
- ▶ India's imports in the chemicals and petrochemicals sector account for about 50% of its total imports, hence the sector has a significant import substitution potential
- ▶ Domestic market for chemicals is expected to grow more than 10% per year in the medium-term (next 5-10 years)
- ▶ Baddi which is a pharmaceutical hub in India is in close proximity to Haryana. Baddi region has huge presence of large pharma companies and there is potential for small pharma units of Karnal to become contract manufacturers for Baddi based large pharma units.



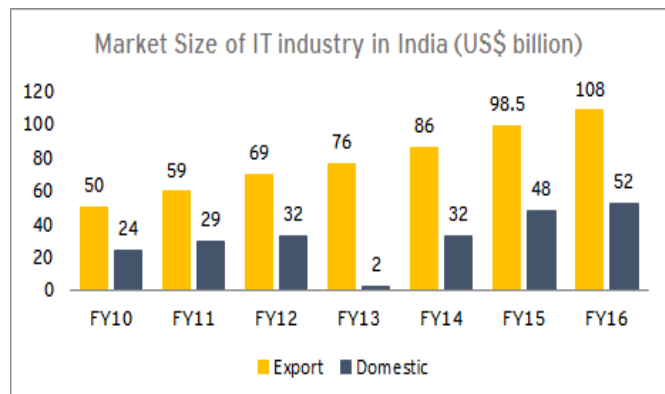
Disablers

- ▶ High need to invest in technology and R&D
- ▶ There are stringent USFDA / EU - FDA norms which acts as major restrictive barrier in engagement of local vendors as exporters.
- ▶ Indian pharmaceutical companies are marred by price regulation, which over time has reduced the pricing ability of companies and marred profitability
- ▶ Highly fragmented industry due to low barriers to entry
- ▶ Lack of product patent which discourages innovation of new drugs.
- ▶ SME related: Lack of accreditation with worlds best standards and low R&D expenditure
- ▶ Requirement for appropriate skilling of the workforce in these sectors

3.1.8 Electronics and IT

India: Key Trends and Growth Headwinds

- ▶ India's electronics market is expected to grow more than 20% per year across most sub-segments, while it is highly import-dependent, with imports growing at more than 15% per year and contributing to 6% of India's imports.
- ▶ For the year 2013-14, India imported almost USD 29 billion worth of electrical and electronics components and finished products and almost half of it came from China.
- ▶ The total market size of IT industry as in 2016 stood at USD 108 billion (export) and 52 USD billion (domestic)²⁷.
- ▶ It is estimated that by 2020, the demand-supply gap in the country will reach close to USD 300 billion and will lead to a situation where the electronics import bill for the country will exceed the oil import bill.



Source: IBEF Sector Profile 2017

Figure 21 Market Size of IT Industry in India 2010-11 to 2016-17

²⁷ IBEF Sector Profile 2017

- ▶ Import substitution potential: As per industry estimates, India's imports related to semiconductor and electronics can go up to USD 400 billion by the year 2020 given that the domestic demand for electronics goods market is expected to reach to USD 250-400 billion by 2020, growing at a CAGR of 27%, this high demand envisages a high potential for import substitution.
- ▶ The National Policy on Electronics envisages a turnover of USD 400 billion by 2020, involving investment of about USD 100 billion and employment to around 28 million people at various levels. It also envisages to build a supply chain of raw materials, parts and electronic components to raise the indigenous availability of these inputs from the present 20 - 25% to over 60% by 2020. In addition, capital subsidy via Modified Special Incentive Package Scheme (M-SIPS).

With the objective of developing India into a global ESDM hub, the government is driving several incentives, including Electronics Development Fund, Electronics Manufacturing Clusters (EMCs) scheme, National Knowledge Network & National Optical Fibre Network. Further, 100% FDI is allowed through automatic route in the ESDM sector.

Haryana: The ESDM Destination

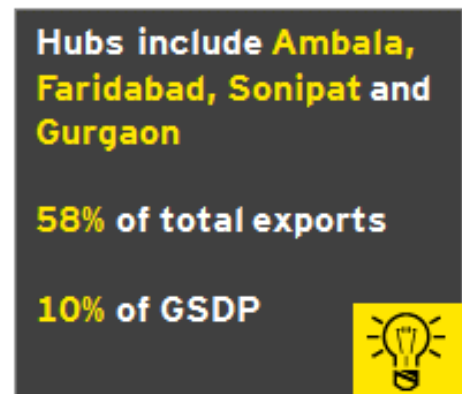
Haryana has also undertaken multiple initiatives for the ESDM sector. This includes the identification of Electronics and IT/ITES as a priority sector in the State as per the Haryana EPP 2015.

With a contribution of close to 10% to State's GDP and 58% to Haryana's exports and giving direct and indirect employment to over 10 Lacs people, IT and ESDM sector has proven to be the epicenter of State's economic growth.

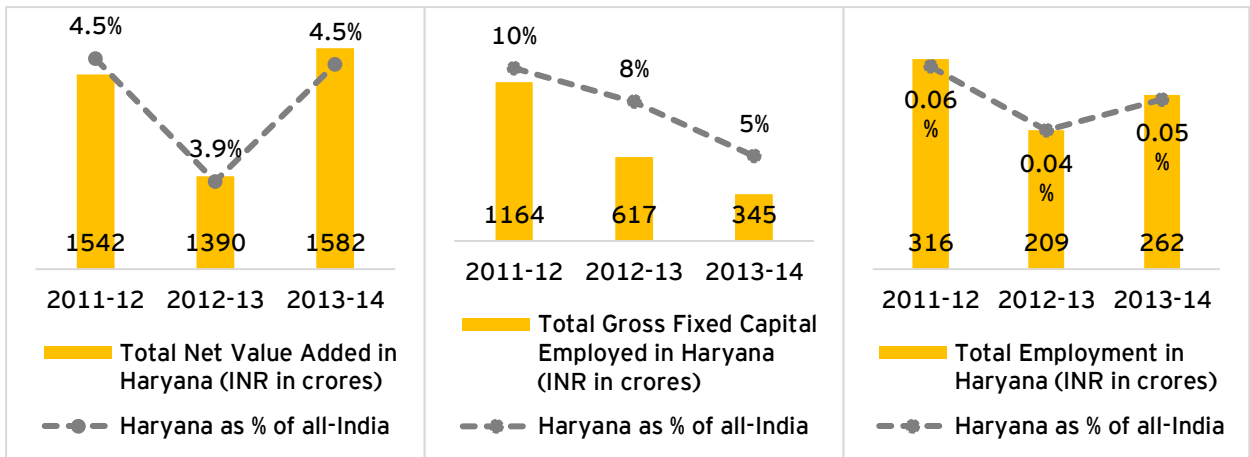
Haryana has a robust IT software sector, which complements the electronics hardware manufacturing industry. Gurgaon is known as the Business Process Management capital of the world, as it employs nearly 5% of the BPM workforce.

With a strong ESDM base in the State including hubs in Ambala, Faridabad, Sonipat and Gurgaon, exports from Haryana (including electrical goods, electronic goods, and software) contributed to 58% of the total exports from the State in 2015-16. Haryana is also the third largest exporter of software in India²⁸.

The figure below provides details of the net value added, gross fixed capital formation, and employment by the electronics and IT sector in Haryana as well as the state contribution of the sector to national levels from 2011-12 to 2013-14:



²⁸ Department of Industries and Commerce, Haryana



Source: Annual Survey of Industries

Figure 22 Electronics and IT Industry Trends in Haryana

To further tap the available potential, the State has come out with a draft IT and ESDM Policy 2017. The policy provides fiscal incentives, infrastructure augmentation, human capital development, simplified regulatory regime, and green measures of production for the IT-ESDM sector. The draft IT policy includes subsidy on capital, land, EPF, stamp duty etc.



Enablers

- ▶ Special focus on Electronics and IT / ITES as a Thrust Sector in Haryana EPP 2015.
- ▶ Proximity to NCR results in a large potential consumer market base
- ▶ Third largest software exporter in India
- ▶ The Gurgaon-Manesar-Bawal and Panchkula-Barwala belts have been declared as Brownfield Electronics Cluster
- ▶ Proposed innovation campus to be developed in Gurgaon along with 7 incubation centers in seven universities in the State, as well as mobile application development center as per EPP 2015
- ▶ Companies like Panasonic and Denso have already set up their base in the State



Disablers

- ▶ Inadequate availability of components at the required scale and competitive prices.
- ▶ Lack of adequate infrastructure such as semiconductor wafer fabrication facilities (FABs).
- ▶ Cost of manufacturing / conversion costs is higher in India as compared to other low-cost manufacturing countries.
- ▶ High level of low cost imports from countries like China.
- ▶ Limited land bank in the state as an impediment to attract fresh investments.
- ▶ R&D competence does not match global standards, and investment in R&D is low.
- ▶ Requirement for trained students in the ESDM sector



04

Key Stakeholders

4. Key Stakeholders

A robust institutional and stakeholder ecosystem is one of the prerequisites for sustaining industrial development. Strong institutions can play a catalytic role in creating enabling environment for MSMEs and facilitating the growth process. Therefore the supporting institutions need to be efficient, capable and contributing.

The prominent stakeholders who impact the MSME sector in Haryana and the support they provide for the MSMEs are mapped in this chapter. Inputs from the stakeholders form an important component of the primary research and provide a strong basis for drawing inferences for identifying challenges and recommending strategies (as highlighted in the subsequent chapters).

The stakeholders are grouped based on categorization mentioned below:

4.1 Technical institutes and industry associations

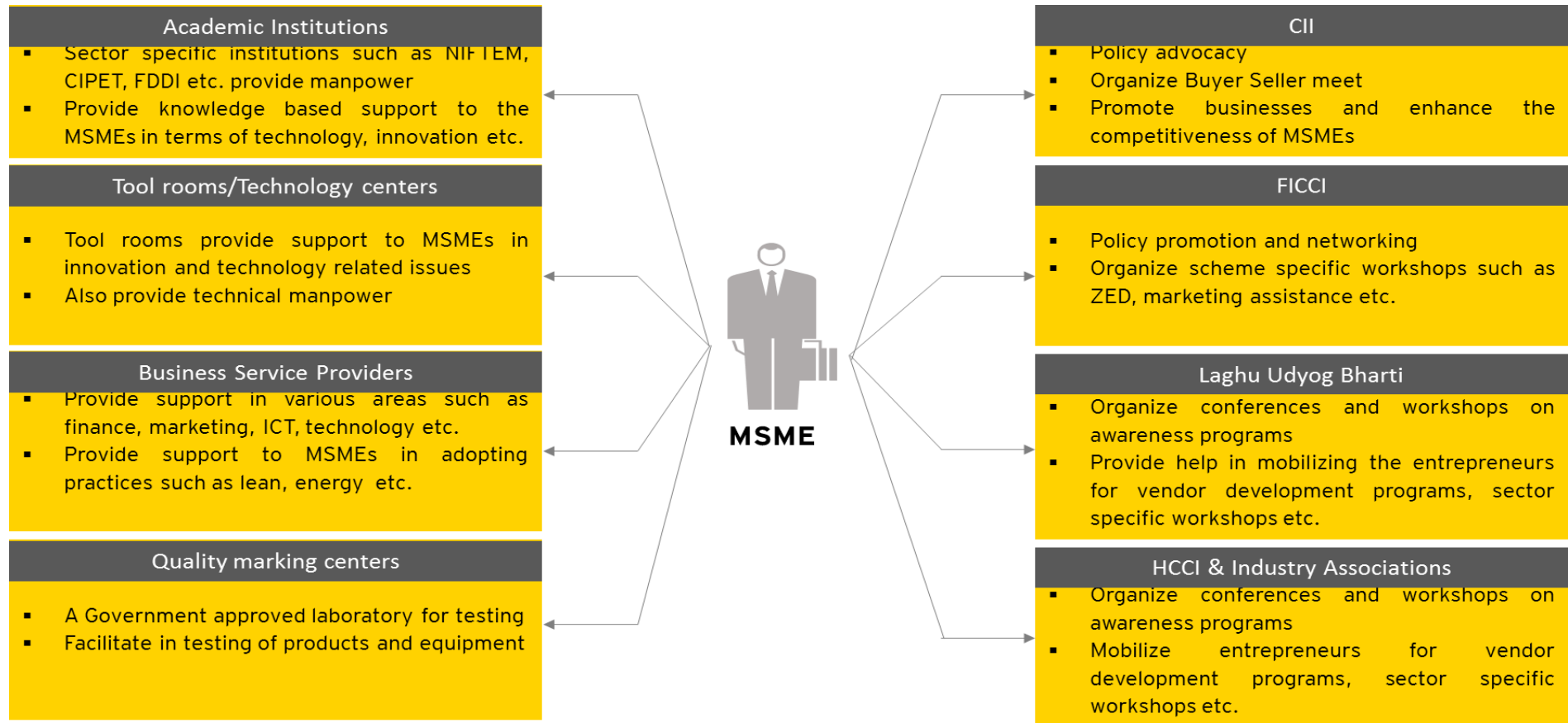


Figure 23 Key MSME related Stakeholders

4.2 Government Departments



Figure 24 Key Government related Bodies and Departments



05

District wise
assessment

5. District wise assessment of the MSME sector

The State has taken lead in terms of planned industrial growth compared to neighbouring States, which has resulted in development of vibrant industrial areas. This chapter mentions the percentage of industrial footprint in each district (in terms of number of units) and district's contribution to the total employment in the state²⁹.

5.1 Type of units (Districts-Wise)

Table 2 District-wise and Unit based Industrial Classification in Haryana

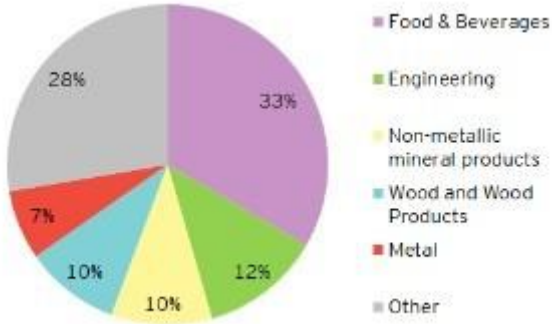
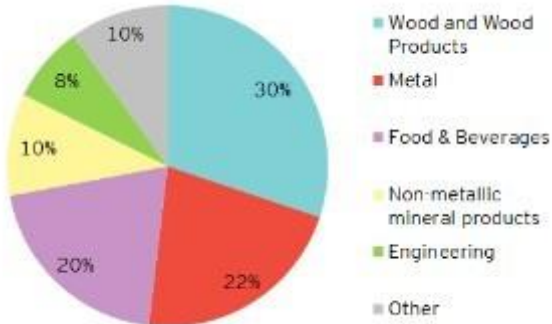
District	Contribution to total Units (%)	Contribution to Employment (%)	Intra-District Sector Contribution (%)	Inter-District Sector Contribution (% of units per sector)
Ambala	8%	1%		<ul style="list-style-type: none"> ▶ 90% of scientific instruments ▶ 17% of electronics ▶ 9% of food & beverage ▶ 7% wood & wood product

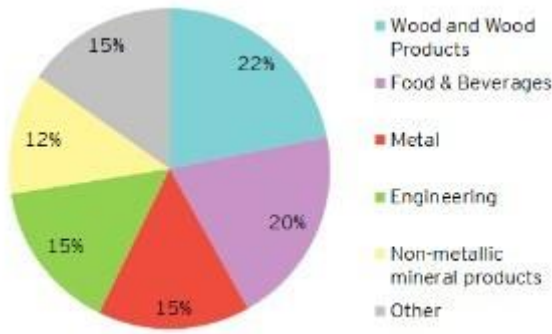
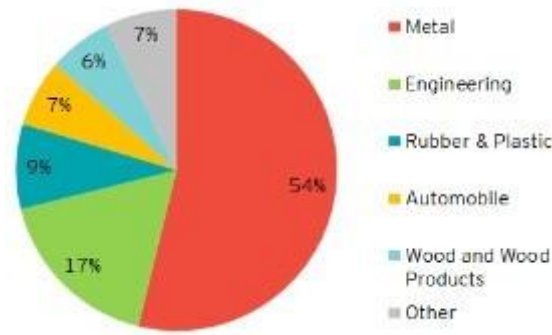
²⁹ Mott Mc Donald industrial survey

District	Contribution to total Units (%)	Contribution to Employment (%)	Intra-District Sector Contribution (%)	Inter-District Sector Contribution (% of units per sector)
Bhiwani	3%	2%	<ul style="list-style-type: none"> Non-metallic mineral products Chemical & Petrochemical Metal Food & Beverages Textiles Other 	<ul style="list-style-type: none"> ▶ 13% of chemical & petrochemical ▶ 8% of non-metallic mineral product
Gurgaon	3%	34%	<ul style="list-style-type: none"> Metal Textiles Automobile Engineering Rubber & Plastic Other 	<ul style="list-style-type: none"> ▶ 14% of automobile ▶ 8% of electronics ▶ 4% of textile

District	Contribution to total Units (%)	Contribution to Employment (%)	Intra-District Sector Contribution (%)	Inter-District Sector Contribution (% of units per sector)
Hisar	4%	3%		<ul style="list-style-type: none"> ▶ 7% of wood & wood product ▶ 6% of chemical & petrochemical ▶ 6% of food & beverage
Jind	4%	4%		<ul style="list-style-type: none"> ▶ 9% of wood & wood product ▶ 8% of automobile

District	Contribution to total Units (%)	Contribution to Employment (%)	Intra-District Sector Contribution (%)	Inter-District Sector Contribution (% of units per sector)
Jhajjar	5%	1%		<ul style="list-style-type: none"> ▶ 19% of non-metallic mineral product ▶ 17% of rubber & plastic ▶ 10% of chemical & petrochemical
Kurukshetra	3%	1%		<ul style="list-style-type: none"> ▶ 10% of food & beverage

District	Contribution to total Units (%)	Contribution to Employment (%)	Intra-District Sector Contribution (%)	Inter-District Sector Contribution (% of units per sector)
Karnal	4%	7%	 <ul style="list-style-type: none"> Food & Beverages Engineering Non-metallic mineral products Wood and Wood Products Metal Other 	<ul style="list-style-type: none"> ▶ 14% of food & beverage ▶ 14% of pharmaceutical
Kaithal	3%	1%	 <ul style="list-style-type: none"> Wood and Wood Products Metal Food & Beverages Non-metallic mineral products Engineering Other 	<ul style="list-style-type: none"> ▶ 7% of wood & wood product

District	Contribution to total Units (%)	Contribution to Employment (%)	Intra-District Sector Contribution (%)	Inter-District Sector Contribution (% of units per sector)
Fatehabad	2%	1%		<ul style="list-style-type: none"> ▶ No significant contribution
Faridabad	15%	3%		<ul style="list-style-type: none"> ▶ 32% of metal ▶ 31% of automobile ▶ 30% of rubber & plastic ▶ 30% of engineering ▶ 15% of electronics ▶ 7% of wood & wood product

District	Contribution to total Units (%)	Contribution to Employment (%)	Intra-District Sector Contribution (%)	Inter-District Sector Contribution (% of units per sector)
Mewat	1%	1%	<ul style="list-style-type: none"> Metal: 42% Non-metallic mineral products: 22% Wood and Wood Products: 19% Automobile: 5% Food & Beverages: 4% Other: 7% 	▶ No significant contribution
Narnaul	2%	1%	<ul style="list-style-type: none"> Metal: 35% Non-metallic mineral products: 27% Wood and Wood Products: 17% Food & Beverages: 11% Engineering: 4% Other: 7% 	▶ No significant contribution

District	Contribution to total Units (%)	Contribution to Employment (%)	Intra-District Sector Contribution (%)	Inter-District Sector Contribution (% of units per sector)
Palwal	3%	1%		▶ No significant contribution
Panchkula	4%	3%		<ul style="list-style-type: none"> ▶ 10% of pharmaceutical ▶ 7% of electronics ▶ 6% of engineering

District	Contribution to total Units (%)	Contribution to Employment (%)	Intra-District Sector Contribution (%)	Inter-District Sector Contribution (% of units per sector)
Panipat	12%	10%		<ul style="list-style-type: none"> ▶ 78% of textile ▶ 6% of electronics
Rewari	3%	1%		<ul style="list-style-type: none"> ▶ 9% of non-metallic mineral product

District	Contribution to total Units (%)	Contribution to Employment (%)	Intra-District Sector Contribution (%)	Inter-District Sector Contribution (% of units per sector)
Rohtak	3%	5%	<ul style="list-style-type: none"> Metal Wood and Wood Products Non-metallic mineral products Engineering Food & Beverages Other 	▶ 13% Petrochemicals
Sirsa	3%	2%	<ul style="list-style-type: none"> Non-metallic mineral products Engineering Wood and Wood Products Metal Food & Beverages Other 	▶ No significant contribution

District	Contribution to total Units (%)	Contribution to Employment (%)	Intra-District Sector Contribution (%)	Inter-District Sector Contribution (% of units per sector)
Sonipat	7%	11%		<ul style="list-style-type: none"> ▶ 18% of chemical and petrochemical ▶ 16% of pharmaceutical ▶ 14% of automobile ▶ 11% of electronics ▶ 10% of rubber & plastic ▶ 8% of textiles
Yamuna Nagar	8%	6%		<ul style="list-style-type: none"> ▶ 20% of wood & wood product ▶ 13% of metal

5.2 Major Industrial Clusters in the State

Haryana has been at the forefront in promoting cluster based industrial growth with the cluster development programme as one of the focal points of its industrial development strategy. Presently, there are 29 identified industrial clusters in the state. As per the Haryana EPP 2015, under the Cluster Development Programme (DC-MSME), detailed sector reports have been prepared for 18 clusters in the state & detailed project reports have been completed for 11 clusters for establishing common facilities centres out of which 5 have already obtained final sanction for funding support from the Ministry of MSME.

Specifically for promoting the MSME sector, in the Haryana EPP 2015, special focus has been laid on Traditional Clusters (Scientific Instruments, metal industry, plywood industry, light engineering and textile), Rural Functional Clusters (Apparel, Footwear and Dairy) and Thrust /Focus Clusters (Textiles and food processing).

Some of the key clusters in the state have been given in the table below:

Table 3 Major Industrial Clusters in the State

Districts	Cluster	No. of Units	Cluster Associations
Faridabad	Faridabad Auto components	2500	Faridabad Industries Association
Faridabad	Faridabad Light Engineering	203	<ul style="list-style-type: none"> ▶ Faridabad Industries Association (FIA) ▶ Faridabad Small Industries Association (FSIA) ▶ Faridabad Manufacturers Association (FMA) ▶ Faridabad Chamber of Commerce & Industries (FCC&I) ▶ All India Laghu Udyog Bharti (AILUB) ▶ NIT Industrial Welfare Association (NITIWA)
Jhajjar	Bahadurgarh Footwear	Total 125 units (MSEs) + 175 Fabricating units	<ul style="list-style-type: none"> ▶ Footwear Park Association, Bahadurgarh ▶ Bahadurgarh Footwear Development Services Pvt. Ltd
Gurgaon	Gurgaon Auto Parts	350	<ul style="list-style-type: none"> ▶ Gurgaon Industries Association ▶ Auto Component Manufacturers Association ▶ Gurgaon Chamber of commerce ▶ NCR Chamber of Commerce
Gurgaon	Gurgaon Readymade Garments	1310	NA

Gurgaon	Manesar Leather & Leather Products	205	North India Leather Products Cluster Pvt. Ltd.
Karnal	Karnal Agricultural Equipment	95	Karnal Agricultural Implements Manufacturers Association
Karnal	Karnal Printing & Packaging	300	Karnal Print Packers Pvt. Ltd.
Karnal	Rice milling cluster	221	<ul style="list-style-type: none"> ▶ Haryana Rice Exporters Association ▶ Karnal Rice Millers Association, Karnal ▶ Rice Millers Association, Taraori ▶ Rice Millers Association, Gharaunda ▶ Rice Millers Association, Nissing ▶ Rice Millers Association, Indri
Panipat	Made up cluster	7475	NIRSA Association
Panipat	Foundry cluster	30	Samalkha Industry association
Panipat	Panipat Floor Covering	331	<ul style="list-style-type: none"> ▶ Haryana Carpet Manufacturers Association(HCMA) ▶ Panipat Export Promotion Council (PEPC)
Panipat	Panipat Home Furnishing	3200	The Panipat Home Furnishing Cluster Pvt. Ltd. (TPHFCPL), Panipat
Sonepat	Kundli Utensils	72	Stainless Steel House Ware Association

Source: Department of Industries & Commerce, Haryana



06

**Key issues and
challenges**

6. Key Issues and Challenges

The MSME sector has emerged as an engine of growth in the country. This sector has exhibited tremendous capacity for employment generation, technical innovation, promoting inter-sectoral linkages, raising exports and reducing regional imbalances.

Despite the importance of MSMEs in the Indian economic growth, the sector has been affected by several challenges such as lack of infrastructure, lack of skilled manpower, difficulties in accessing capital, dependence on obsolete technologies, lack of capacities for product and market diversification and so on. Haryana's manufacturing MSME spectrum comprises of both state of the art medium enterprises (mainly Panipat, Faridabad and Gurgaon) as well as a large number of traditional micro and small enterprises (mainly in districts such as Panchkula, Ambala, Karnal, Rohtak, Kaithal etc.) which face number of challenges.

These micro and small units need handholding and facilitation support to overcome the challenges and contribute to the growth of the state's economy.

Some of the key challenges faced by MSMEs in Haryana have been mentioned below:

6.1 Absence of Proper Material Testing Facilities

One of the major issues' hampering the quality and efficiency of the state's MSMEs is the lack of testing facilities in MSME clusters. Even the quality marketing centres are decades old and the testing equipment available has become obsolete. These centres do not have any certification such as NABL, Good Laboratory Practices (GLP) etc. As a result, the MSMEs get the material testing done from the private laboratories resulting in high costs and delay in supply of goods. This is also restricting the ability of many units to supply their produce to large MNCs and anchor units since these customers demand certified products.

The "Testing" gap- Dairy and Plastic Packaging Cluster, Karnal

There are rice, dairy and plastic packaging clusters in and around the Karnal region but no lab available to test their raw materials and finished products. Additionally, the bakery units of Karnal are unable to supply their products (pizza base, burger bun etc.) to large food chains like Dominos and Mc Donald's due to lack of availability of testing facilities for product certification.

6.2 Lack of Policy Outreach and Regulatory Facilitation

Having access to information on various schemes and government support initiatives is crucial for effective facilitation of MSMEs. However, based on our discussions with industry associations, it is observed that especially in 'C' category areas/backward districts like Kaithal, Jind etc., there is not much awareness on the industrial policy.

Also, the MSMEs are not aware of procedures for availing of incentives and subsidies. In the recent Haryana EPP 2015, the state government has notified schemes such as mini cluster development, setting up of primary processing centres in rural areas, critical infrastructure schemes etc. But due to lack of awareness, the MSMEs have not availed these schemes and so far no approvals have been granted under these schemes.

This is due to lack of publicity campaigns, awareness programs by the state government and also all DICs are not empowered with adequate knowledge and information to guide the MSMEs in providing information on policies and schemes.

Since the District Industries Centres (DICs) serve the role of the primary interface point with the potential investors in providing single window service for information access on regulatory processes, approvals and various schemes provisions; the in-house capacity building of the DIC staff becomes important. In this regard as highlighted during primary visits to the DICs in areas like Jind and Kaithal, in addition to the dearth of staff and operational infrastructure, the existing staff lacks information on the latest policy and scheme provisions and incentive structure. This results in limited outreach and handholding on the investor by the DICs. A dedicated capacity building of DIC staff as a first step, will have to be focussed upon in order to facilitate MSMEs and potential entrepreneurs in the respective districts.

6.3 Lack of Infrastructure Availability to MSME

The lack of proper infrastructural facilities can cause serious damages to an enterprise's value chain process, like production, consumption and distribution of the products. The infrastructure can be divided into two categories i.e, technical infrastructure and physical infrastructure. The issues related to technical infrastructure is covered under the 'Access to Technology' section.

The physical infrastructure consist of roads, street lighting, effluent plants, non-adequate water supply and power distribution, common facilities for workers etc.

HSI IDC maintains several industrial areas across the state. These industrial areas have better facilities. However, a large number of micro and small units in Haryana operate out of agriculture land and even from non-conforming zones. These units face several infrastructure challenges such as bad roads, lack of proper drainage systems, absence of street lights, and unavailability of ETPs etc.

For instance, Yamunanagar is famous for its plywood industry with presence of over 500 units. However, most of these units are set up on agricultural land and have been deprived of basic infrastructural facilities. During the rainy season, the entrepreneurs cannot easily access their units due to absence of drainage system,

6.4 Limited Access to Market

Based on secondary and primary research (stakeholder inputs and focus group discussions) this report identifies access to markets as a challenge for MSMEs with implications, in terms of an inability to tap international markets as well as national and regional markets:

- ▶ *Inability to tap international markets due to low export and trade competitiveness:* The state has remained low on export competitiveness due to the inability to establish strong trade relations and an effective trade promotion mechanism/ framework. Haryana's geographical location leads to an additional cost that is borne by MSME exporting units due to large distances from sea ports, making their products less competitive. Haryana is lagging behind some of the top states in terms of export intensity (exports per sales) of MSMEs. As can be observed in the figure, export intensity of MSMEs is 19% in Uttar Pradesh, 15% in Tamil Nadu, 13% in Karnataka, Gujarat and Rajasthan, and 11% in Haryana³⁰. Additionally, from a trade competitiveness point of view, there has been an inability of any of the state governments in India to adopt the WTO's input linked smart incentives.

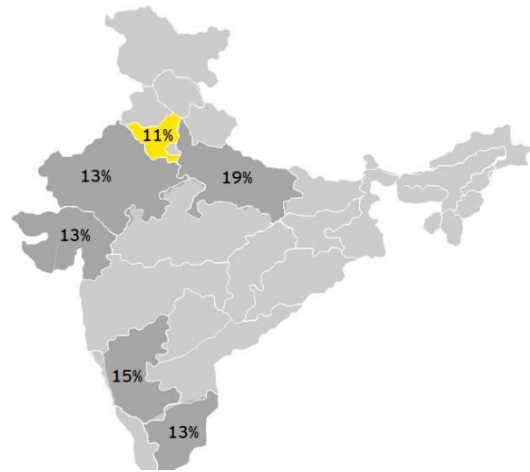


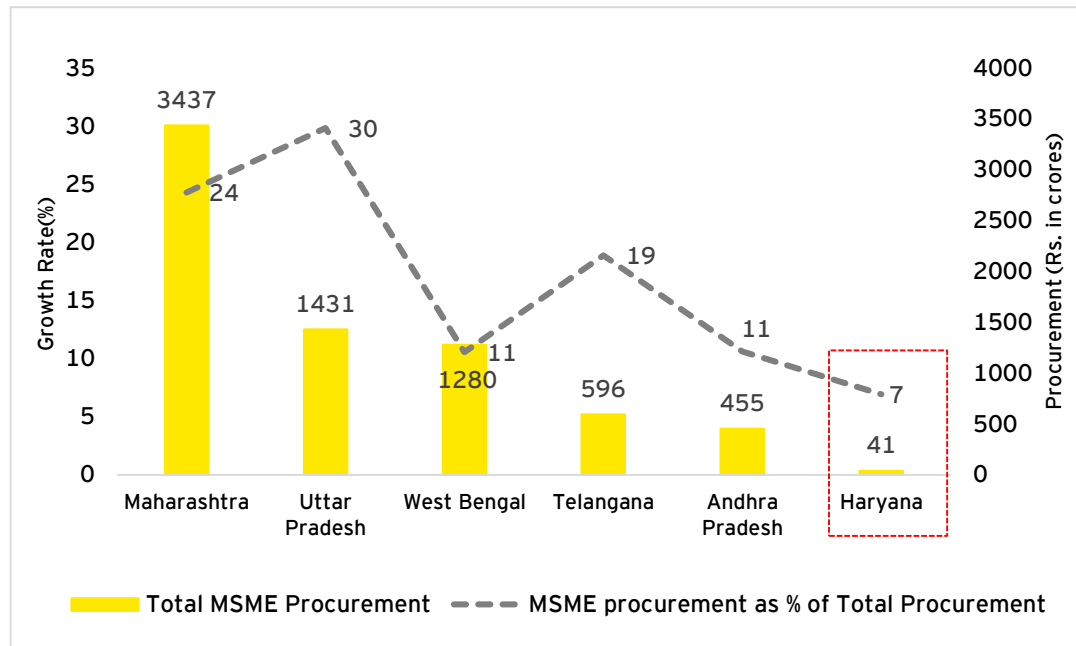
Figure 25: Export Intensity of Leading States

- ▶ *Lack of national and regional market access for Haryana's MSMEs:* Despite having a strong MSME footprint, a thriving manufacturing sector and proximity to NCR, MSMEs in the state have been unable to efficiently tap the markets in the neighbouring states as well as the product markets nationally. Some of the key reasons have been the inability to meet anchor units requirements, limited capital access, brand promotion solutions, marketing support, logistics and sales support, information and communication technology (ICT) support and dedicated market intelligence. These factors have stalled the fervour to take the MSME enterprises to the next level.

Lack of adequate support from Central/ State PSUs procurement as per the public procurement policy in procuring from MSMEs has been a prominent gap area in market development. As per the policy, PSUs are mandated to source 20% of goods from MSMEs. However, due to the stringent qualification parameters, the MSMEs are unable to supply the goods to the PSUs.

Haryana is ranked 13th in terms of total MSME procurement by the PSUs. As can be seen in the figure below, Haryana contributes to only 7% of total MSME procurement (to the tune of Rs. 41 crores) out of total procurement, in comparison to states like UP and Maharashtra (with 30% and 24% respectively). Thus, strengthening of MSMEs as vendors in Haryana has been largely ignored.

³⁰ 4th All India MSME Census



Source: MYMSME Web Portal

Figure 26 Total CPSU Procurement from MSMEs (2015-16)

Some of the major challenges being faced by MSMEs in Haryana with regards to market access highlighted during stakeholder discussions are mentioned below:

- ▶ Lack of access to exports particularly for textile industry: The small and micro industries in textile industry act as vendors and supply their produce to export houses who in turn exports the products to various countries. These units, located at Panipat are unaware about export documentation and hence cannot directly export the products.
- ▶ Limited access to digital marketing: NSIC has launched portal to promote online marketing of MSMEs. However, it mainly act as facilitator for selling the products. The platform does not provide an opportunity for networking i.e. no support in awareness campaign among potential stakeholders, a dedicated resource in product profiling, pricing etc. which limits the selling of products.
- ▶ Lack of focused sector specific marketing meets: In the year 2016, the state level vendor development programmes were organized in Hisar, Sonapat, Panipat, and Panchkula. Over 300 MSMEs participated in the meets. These programmes only provided a platform to anchor units and vendors to exchange information. However, sector specific meets are not being conducted and hence the desired results are not being realised.

The lack of market access in terms of public sector procurement further exacerbates in case of SC/ST owned enterprises (close to nil). To understand the key reasons for low procurement, EY interacted with SC/ST enterprises as a follow-up to the Indian Oil (IOC) vendor development meet held at Karnal, Haryana during June, 2016, to determine the impact of the IOC presentation and the vendor meet and identify the

key reasons for low procurement. The vendor development meet was targeted towards imparting awareness to the SC/ST owned enterprises to understand their procurement process and type of goods that they are expecting to source from MSEs. The following key points emerged as challenges being faced by SC/ST owned enterprises:

- ▶ Lack of knowledge of units on procurement initiatives such as e-procurement, quality requirements etc. and guidance on schemes
 - ▶ Communication barriers and lack of handholding by officials from CPSU
 - ▶ Lack of guidance and know-how on technology and finance
- ▶ *As-is assessment of trade scenario:* At an all-India level, based upon the magnitude of exports and imports, an assessment of import markets for India's manufacturing export for thrust sectors like food processing, textiles, chemicals, heavy machinery, electrical machinery, transport equipment (which are also the focus sectors for Haryana) has been given below along with a brief profile/status of inter-country trade relations.

Table 4 Focus Sectors and Major Importing Countries and Sectors

Country	Food Processing	Textiles	Chemicals	Heavy Machinery	Electrical Machinery	Transport Equipment
United States	✓	✓	✓	✓	✗	✗
United Kingdom	✓	✓	✓	✓	✗	✗
Germany	✓	✓	✓	✓	✗	✗
Italy	✓	✓	✓	✓	✗	✗
France	✓	✓	✓	✓	✗	✗
China	✓	✓	✓	✓	✗	✗
Australia	✗	✗	✗	✗	✓	✓
Canada	✓	✓	✗	✓	✓	✓
Japan	✓	✓	✓	✗	✗	✗
Korea	✗	✓	✓	✓	✗	✗
Mexico	✗	✗	✗	✓	✗	✗
Chile	✗	✗	✗	✗	✓	✓
Russia	✓	✗	✗	✓	✗	✗

Source: EY analysis based on export-import data (2008-2012) from Director General of Foreign Trade database

India-US:

- ▶ India does not have a trade agreement with the US nor is a part of any trade agreement involving the US.
- ▶ There is a strong possibility to work closely with India-US Trade Policy Forum, India-US Investment initiative, US-India Infrastructure Collaboration Platform and India-U.S. Science & Technology Forum.

India-UK:

- ▶ India is negotiating a comprehensive trade agreement with the UK.
- ▶ There is a possibility to work closely with:
 - ▶ UKTI to get delegate visits to the state - have road shows in the UK jointly with UK Trade & Investment (UKTI) and UK India Business Council (UKIBC).
 - ▶ India Joint Economic and Trade Committee (JETCO) in sectors like food processing, textile and heavy machineries.
 - ▶ Buyers/importers from the UK for sectors like textile and food processing in collaboration with export promotion councils like Agricultural and Processed Food Products Export Development Authority (APEDA) and UKTI.
 - ▶ Work with the UK to understand EU food safety standards and requirements and set up joint product testing labs which is accredited in the EU.
 - ▶ Encourage industry to get BRC Global Standards quality certificates - a number of Indian companies which are exporting have this certificate³¹.

India-Japan:

- ▶ India and Japan have a comprehensive trade agreement and Japan is one of the key investors in India in business clusters and economic corridors. However, Japanese investments tend to locate in DMEC.
- ▶ There is a possibility of cooperation in agro processing (fish and shrimps exports) - technical cooperation in sanitary and phyto-sanitary support (SPS) and technical barriers to trade (TBT) to reduce market entry barriers in Japan, setting up of Japanese quality labs for testing in India so that the products are acceptable in Japan.
- ▶ There is a need to work closely with Japan International Cooperation Agency (JICA) to invite Japanese investors to the state.

India -Korea:

- ▶ India-Korea have a comprehensive trade agreement.

³¹ <http://www.sgsgroup.in/en-GB/Trade/Consumer-and-Industrial-Goods/Global-Schemes/Global-Food-Safety-Initiative-Certification/BRC-Certification-Global-Standard-for-Food-Safety.aspx>

- ▶ There is a possibility to work closely with the Korea Chamber of Commerce & Industry; Korea International Trade Association (KITA) and Korean Trade Promotion Agency (KOTRA)

6.5 Limited Access to Technology

Most of the micro and small units in Haryana across various clusters such as Kundli stainless steel, Bahadurgarh footwear, Panchkula engineering, Ambala scientific instruments, Karnal plastic packaging, Samalkha foundry etc. continue to deploy obsolete technologies as due to lack of awareness and financial capabilities. Additionally, the state does not have dedicated technology transfer programmes. In order to link with larger OEMs, these MSMEs need to re-evaluate their technology deployment in order to improve productivity and effectiveness with special focus on lean manufacturing, quality standards and use of ICT.

The access to technology shall consist of facilities such as tool rooms, common facility centres, ICT, lean manufacturing, auditing etc. Currently, the state does not have any established tool room which can provide support to MSMEs for job works and product innovation. In addition to the absence of tool room, there is no presence of common facility centres in the state. The desired growth in MSMEs is not possible with the absence of tool rooms and CFCs.

There are close to 30 identified clusters in various areas such as engineering, auto, scientific instruments, food processing etc. The majority of the industries are micro and small in nature. These clusters do not have capacity to purchase machinery which would improve the efficiency and productivity.

Some of the specific insights pertaining limited technology access as highlighted during primary research are mentioned below:

- ▶ The state also has a strong footprint of pharmaceuticals, scientific instruments, footwear etc. and these sectors lack proper R & D centre in the state for product development.
- ▶ The Quality marking centres (QMCs) across the state are operating with obsolete technology.
- ▶ It is observed that under the Ministry of MSME, National Manufacturing Competitiveness Program scheme only about 20 SPVs/150 units have availed the assistance in adopting lean manufacturing techniques. The assistance has been availed majorly in General engineering and Auto sectors. This shows that there is lack of awareness on benefits of adopting the lean manufacturing techniques.
- ▶ MSMEs often find it difficult to access the subject matter experts/BDS providers for solutions on technology related issues. The state does not have any list of BDS providers who can provide solutions and assist the MSMEs w.r.t technology upgradation.
 - ▶ Access to customers such as MNCs and anchor units has also been limited due

to lack of technological capacities, low production scales and outdated processes. For instance, the plastic packaging units of Karnal are unable to cater to the packaging requirements of export oriented rice millers, new dairy plants and large pharma units in the region as they do not have modern moulding and printing technologies to produce products demanded.

In order to drill down the identification of technology related gaps at the cluster level, EY conducted primary visits to the major manufacturing clusters in the state and interacted with members from the respective industry associations and local industry players. The following are some of the technology related issues highlighted during the stakeholder discussions:

1. **Agri-Implements Cluster, Karnal:** As per the Karnal Agri-Implements Manufacturers Association, there is lack of high-end technology at the Agri-Implement Cluster in Karnal. Presently, the units in the cluster manufacture dyes on a conventional machine which typically takes about 2 days. The units do not have access to high end access to machines such as VMC which shall take about 4-5 hours in dye manufacturing. With the setup of mini tool room, the units can have access to this high end machining thereby improving the productivity.
2. **Dairy Cluster, Karnal:** As per the inputs from the Karnal Dairy Association, there is an absence of a dedicated whey dryer in the entire dairy industry across Haryana. This is a critical technology gap resulting in wastages of whey as a by-product which can otherwise be an important market oriented by-product with major derived market demand from products like protein powder and energy drinks & bars.
3. **Textile Cluster, Panipat, Gurgaon and Faridabad:** Although textile cluster in Haryana enjoys traditional strength as a focus sector but the cluster suffers from the lack of dedicated joint in-house facilities for both dyeing & processing and garmenting. Since either of these functions needs to be outsourced, this results in an inconsistent quality and massive rejection of the output by the export houses.
Additionally, lack of an optimal capacity effluent treatment plant (ETP) in Haryana servicing the textile units in Panipat, Gurgaon and Faridabad is also a major technology bottleneck with larger implications for environment. In view of this, the State government has accorded a high priority in setting up units with in-house dyeing and garmenting across the textile cluster units in Panipat, Gurgaon and Faridabad.
4. **Engineering Cluster, Rohtak and Rai:** Presently, there is no electroplating and heat treatment facility in the engineering clusters at Rohtak and Rai. As highlighted by the local industry association members due to the lack of electroplating and heat treatment facility, the quality of engineering goods is inconsistent. As a result, the micro and small units continue to remain tier-II suppliers and are unable to supply to large anchor units.

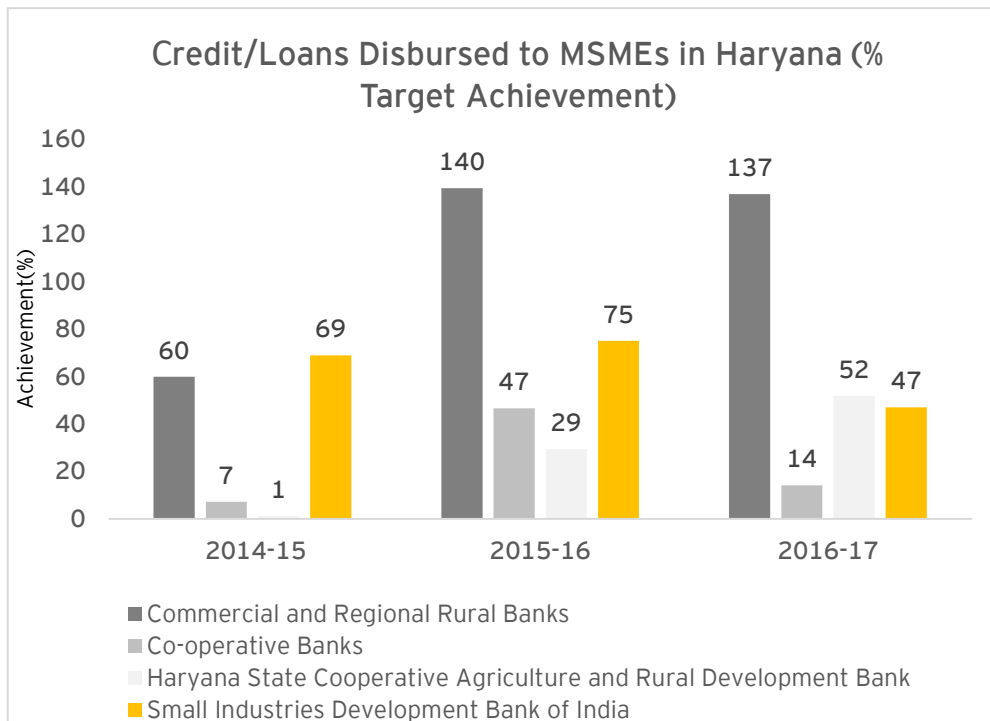
6.6 Access to Finance

Lack of timely and adequate credit availability, particularly during the early and growth stages is one of the most glaring challenge being faced by MSMEs in the state.

Limited access to finance is being manifested in terms of: a) Limited offtake and infusion via Institutional financing b) Venture capital funds/ seed funds.

- ▶ **Institutional Financing:** Despite offering a slew of incentives and assistance via government schemes and the priority sector lending mandate, the credit offtake and margin money/subsidies offered by the lending institutions to MSMEs in the state has only been a satisfactory. In some cases, bankers are selective in giving collateral free credit to MSME units. A lack of financial literacy among several MSME units has also led to their financial exclusion. As described by one stakeholder, one of the primary reasons for limited access to finance is higher credit risk outlook, due to MSMEs operating at thin margins and with low capital base. This exposes them to a higher risk to withstand cyclic economic and industry pressures. As a result, there is a reluctance of financial institutions to lend to MSMEs.

Over the last 3 years, 2014-15 onwards, only the commercial banks and the regional rural banks have been able to meet its lending targets (surpassing its lending target in 2016-17), the achievement rates for other lending institutions- SIDBI, Cooperative Banks and Haryana State Cooperative Agriculture and Rural Development Bank has been dismally low (as can be seen from the figure below).



Source: Haryana Economic Survey 2016-17

Figure 27 Credit/Loans Disbursed to MSMEs in Haryana (% Target Achievement)

The government has been proactive in offering financial assistance through various schemes under which MSMEs needing financial assistance can approach the banks for aid as per the specific scheme related financial aid such as Prime Minister Employment Generation Programme (PMEGP), Credit Linked Capital Subsidy Scheme (CLCSS) and Credit Guarantee Fund Trust for Micro and Small Enterprise (CGTMSE). But due to lack of awareness, MSMEs in Haryana have not been able to optimally leverage and avail scheme based financial assistance.

In case of PMEGP, for instance, Haryana's PMEGP subsidy disbursement as % of all-India disbursement averaged 3.5% from 2014-16 (as can be seen from the table below). This is far less than some of the other leading states (in terms of MSME footprint) - Uttar Pradesh (15%), Madhya Gujarat (8%), Madhya Pradesh (7%).

Table 5 Margin Money Utilized under PMEGP (2014-16)

Margin Money Utilized under PMEGP (2014-2016)	2014-2015		2015-16	
	Subsidy disbursed/utilized (in lakhs)	As % of all-India subsidy disbursement under PMEGP	Subsidy disbursed/utilized (in lakhs)	As % of all-India subsidy disbursement under PMEGP
Gujarat	3874	9	4655	7
West Bengal	2132	5	3151	5
Maharashtra	2573	6	3808	6
Tamil Nadu	3308	8	3478	5
Madhya Pradesh	2982	7	4300	7
Uttar Pradesh	6071	14	10804	16
Haryana	1620	4	1818	3

Source: MSME Annual Report, various editions

► *Venture capital funds/ seed funds:*

As an important means for equity financing, venture capital funding is a crucial alternate credit avenue for MSMEs given that the credit requirement of MSMEs are too large for microfinance institutions and too small or too risky for commercial banks.

But the equity financing model has failed to reach the MSMEs in the state, primarily due to two reasons: a) general lack of awareness among SMEs about equity capital, stock markets and funding options, other than banks, b) preference of equity financing and venture support towards the less risky e-commerce and IT-based start-ups and less inclination towards manufacturing based enterprises, and c) The non-corporate structure and small size of majority of MSMEs makes the Venture Capitalists reluctant to invest in them due to higher transaction costs and difficulties in exits out of such investments.

As brought out by a stakeholder, the financial support for high potential electronics sector is limited with the scale or size as a problem in the case of semiconductor

industry in India. The semiconductor designing requires high end manpower with a high capital requirement, but the designers have not got adequate funds in India. Risk of financing such businesses emanates due to an absence of an assured market and strong demand as venture capitalists will participate only if there is a market. The absence of market, as in the case of fabrication (semiconductors) has been due to lack of demand for chips in India and absence of downstream electronics production. Building a chip fabrication unit is capital intensive: it costs approximately Rs. 18-20 crores. So setting up a fabrication unit has not been a worthwhile option (fabrication units in India are likely to be utilized only to the extent of 10-20 % while the rest of the capacity (80%) may remain unutilized. As a result, despite the high cost of borrowing, debts are overleveraged given the lack of opportunity to raise equity capital.

Further the use of ICT to promote virtual financial platforms for budding entrepreneurs has also not been effective on the implementation front.

6.7 Lack of Access to Skilled Manpower

The mounting demand-supply gap for manpower across unskilled, semi-skilled and skilled categories, is a major stumbling block for growth of MSMEs in Haryana. As per the District-level Skill Gap Study of the state of Haryana by National Skill Development Corporation, an additional 26.48 lakh (between 2012 and 2017) and another 24.21 lakh during 2017-22 are expected to enter the working age group population. Out of these, Haryana will register a gross addition of 12.74 lakh and 11.65 lakh people to labour force (i.e. portion of the working age population willing to seek employment and work) during 2012-17 and 2017-22 periods respectively. However, with this increase in working age population, the demand-supply gap of manpower is expected to increase across all districts ranging from 6% to 151% with the overall demand-supply gap in Haryana to the tune of 13, 12,637 in 2017-22 (an increase of 24% from 2012-17) / Some of the districts with the most glaring supply shortage of manpower (in terms of % increase in skill gap from 2012-17 to 2017-22) will be Fatehabad, Jind, Kaithal and Bhiwani (refer table below).

Table 6 District-Wise Demand-Supply Gap for Manpower in Haryana

District wise Demand-Supply Gap for Manpower	2012-17	2017-22	% Change in Overall Skill Gap
Ambala	93,254	99,081	6
Bhiwani	20,295	34,531	70
Faridabad	1,45,609	1,81,548	25
Fatehabad	6,352	15,941	151
Gurgaon	2,35,711	2,50,775	6
Hisar	37,664	54,404	44

Jajjhar	24,181	38,156	58
Jind	5,011	12,163	143
Kaithal	6,798	15,744	132
Karnal	29,951	38,788	30
Kurukshetra	29,765	37,042	24
Mewat	42,205	52,182	24
Mahendragarh	18,856	21,067	12
Palwal	55,953	63,284	13
Panchkula	78,670	83,831	7
Panipat	68,746	75,569	10
Rewari	28,057	35,871	28
Rohtak	34,228	46,331	35
Sonipat	98,707	1,10,518	12
Sirsa	42,221	44,315	5
Yamunagar	37,556	49,130	31
Haryana	10,59,959	13,12,637	24

Source: National Skill Development Corporation of India-Haryana (2012-17 and 2017-22)

As regards manufacturing based MSMEs in particular, skilled manpower is an important factor requirement with manufacturing industries facing serious issues to employ appropriate manpower, as most skilled graduates prefer to work in services sector than in manufacturing. This supply shortage of quality skilled personnel is manifested both in terms of technical knowledge and soft skills/behavioural aspects.

As can be seen from the table below, skilled manpower deficit in 2017-22 will be pronounced in industry intensive districts like Gurgaon, Faridabad, Ambala, Panipat, Sonipat with major concentration of high-end manufacturing industries like Auto Components, Engineering, Electrical & Electronics and Scientific Instruments.

Table 7 Skilled Manpower Deficit and Focus Industries

Total Skilled Manpower Deficit 2017-2022 by Districts		
Districts	Skilled Manpower Deficit	Focus Manufacturing Sectors
Ambala	4395	<ul style="list-style-type: none"> ▶ Construction & Construction Based Materials ▶ Scientific Instruments ▶ Food Processing

		<ul style="list-style-type: none"> ▶ Fabricated Metal
Faridabad	20,779	<ul style="list-style-type: none"> ▶ Construction & Construction Based Materials ▶ Scientific Instruments ▶ Fabricated Metal ▶ Auto Components ▶ Chemical and Chemical Products ▶ Beverages and Food Processing
Fatehabad	363	<ul style="list-style-type: none"> ▶ Construction & Construction Based Materials ▶ Food Processing
Gurgaon	32,274	<ul style="list-style-type: none"> ▶ Construction & Construction Based Materials ▶ Scientific Instruments ▶ Fabricated Metal ▶ Auto Components ▶ Engineering ▶ Electrical and Electronics
Hisar	1076	<ul style="list-style-type: none"> ▶ Construction & Construction Based Materials ▶ Food Processing
Mewat	3,290	<ul style="list-style-type: none"> ▶ Construction & Construction Based Materials ▶ Auto Components ▶ Rubber and Plastics
Palwal	5423	<ul style="list-style-type: none"> ▶ Construction & Construction Based Materials ▶ Food Processing ▶ Fabricated Metal
Panchkula	13,289	<ul style="list-style-type: none"> ▶ Construction & Construction Based Materials ▶ Food Processing ▶ Fabricated Metal ▶ Pharma and Medicine ▶ Engineering, Electrical and Electronics
Panipat	2338	<ul style="list-style-type: none"> ▶ Construction & Construction Based Materials ▶ Textiles ▶ Engineering ▶ Chemical and Chemical Products
Sirsa	281	<ul style="list-style-type: none"> ▶ Construction & Construction Based Materials ▶ Food Processing ▶ Agro Based Industries
Sonipat	1202	<ul style="list-style-type: none"> ▶ Construction & Construction Based Materials ▶ Scientific Instruments

		<ul style="list-style-type: none"> ▶ Food Processing ▶ Fabricated Metal ▶ Chemical and Chemical Products ▶ Beverages ▶ Auto Components
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Source: National Skill Development Corporation of India-Haryana (2012-17 and 2017-22)

With the recent focus of the state government in promoting focus industrial sectors, with most of them requiring the use of high-end manufacturing (ex.-electronics, engineering, auto-manufacturing, precision engineering-defence and aero-space), this skilled manpower shortage is expected to have serious implications in realising an effective industrial growth and manufacturing.

As per stakeholder discussions, the following were identified as some factors which are exacerbating the skilled manpower deficit in the State:

- ▶ MSMEs face challenges in retaining and managing skilled manpower, who often change jobs with higher pay scale.
- ▶ There is a lack of knowledge on institutes and courses offered there for hiring of individuals with the right skill set, resulting in a skill mismatch.

6.8 Government Schemes to Address the Issues

There are many schemes notified by Government of India and particularly the Government of Haryana under its Enterprise Promotion Policy (EPP) 2015 address the issues highlighted in the section above.

Some of the major schemes have been mapped against the issues identified in different areas is mentioned below:

Table 8 Key Government Schemes for MSME related Issues

Areas	Issues	Government Schemes	Haryana Enterprise Promotion Policy 2015
Finance	<p>Lack of availability of cheap credit, primarily to meet working capital requirements</p> <p>Collateral requirements from banks</p> <p>Limited access to equity capital</p>	<p>Credit Guarantee Scheme: For collateral free loans</p> <p>EMERGE Scheme (MSME specific exchange enabling MSMEs to tap market for raising funds)</p>	<p><i>Financial Incentives:</i></p> <p>Various incentives as per categories</p> <p>Collateral free credit guarantee scheme</p>

Areas	Issues	Government Schemes	Haryana Enterprise Promotion Policy 2015
	Limited access to foreign funds		
Skill Availability/ Capacity Building	<p>Availability of skilled manpower with practical knowledge at affordable rates - for manufacturing, related services and marketing</p> <p>Lack of support for scaling up</p> <p>Lack of career growth opportunities for employees</p> <p>Manpower attrition and high training costs</p>	<p>E - clubs scheme: For Promoting Entrepreneurship</p> <p>Capacity Building for Associations</p> <p>National Award Scheme</p> <p>Skill development through NSDC and other Ministry schemes</p>	<p>Employment generation subsidy and capacity building incentives for special and general categories</p>
Market Access	<p>Lack of knowledge of domestic market size and the complexities of trade</p> <p>Low investment in marketing initiatives such as brand building, advertising, after-sales</p> <p>Lack of awareness and access to global markets</p>	<p>Participation in International Trade Fairs</p> <p>Marketing assistance and Technology up gradation</p> <p>Public procurement policy for MSME</p>	<p>Public procurement policy for MSME</p> <p>Financial assistance to MSME associations for funding market studies, market creation efforts, quality improvement effort and disseminating this information to MSMEs</p>
Technology and Productivity	<p>Lack of awareness of latest technologies</p> <p>Limited scale of operations to enable use of latest technologies</p> <p>Low investment in technology, leading to low productivity and poor product quality</p> <p>Poor work processes leading to increased cost</p> <p>Lack of product design and development</p>	<p>Technology and Quality Upgradation Scheme (TEQUP) scheme for technological upgradation</p> <p>Credit linked Capital Subsidy Scheme for technology up-gradation</p> <p>Lean Manufacturing (under National Manufacturing Competitiveness Programme)</p> <p>MSE Cluster Development Programme</p> <p>Scheme for Information &</p>	<p>Credit linked Capital Subsidy scheme for technology up-gradation</p> <p>Energy and audit assistance</p> <p>Testing equipment assistance</p> <p>Assistance for technology acquisition</p> <p>Mini cluster development scheme</p>

Areas	Issues	Government Schemes	Haryana Enterprise Promotion Policy 2015
	capabilities	Communication Technology	
Innovation	Limited emphasis on innovation, design or process improvements As newer and better products come into the market, the older products find fewer takers and the MSME find survival difficult	Scheme for Intellectual Property Rights Design clinic scheme for innovation in design Technology Centre coming up at Rohtak to aid product development	Reimbursement of patent cost Subsidy in design clinic scheme
Quality and Sustainability	Emphasis on quality, both products and processes has been low, making global integration difficult Lack of adoption of green manufacturing practices due to low/no incentivization	ISO 9000/14000 expenses reimbursement scheme Quality Management Systems/ Quality Testing Tools (under National Manufacturing Competitiveness)	Scheme for environment compliance
Infrastructure	Poor condition of roads, lack of drainage and sewerage systems, erratic power supply, non-availability of water etc. Lack of common facilities like CETP, tool rooms, design centres, testing labs etc.	MSE Cluster Development Programme - Infrastructure Development Modified Industrial Infrastructure Upgradation Scheme	Mini Cluster Scheme Critical infrastructure scheme

Note: For detailed information on schemes, refer annexure 2 for compendium of schemes

6.9 SWOT analysis

Based on the key issues, challenges identified and highlighted in the above section, a SWOT analysis for MSME sector in Haryana has been conducted to distil the current scenario and identify the key issues that need to be addressed.

Table 9 SWOT Analysis for MSME Sector in Haryana

Strength	Weaknesses
<p>Business Environment</p> <ul style="list-style-type: none"> ▶ Among the top six states in the country for ease of doing business. ▶ Single window clearance system. ▶ Dedicated investment promotion officers to track the progress of investments. ▶ Setting up of Haryana Enterprise Promotion Board to expedite accelerated development of the state, primarily responsible for expediting sectoral clearance process. ▶ Time bound clearance and approval system. ▶ Investor friendly policy. ▶ Stable and majority government leading to stable policy and regulatory framework. <p>Entrepreneurship Ecosystem</p> <ul style="list-style-type: none"> ▶ Incentives for start-up. <p>Skill development</p> <ul style="list-style-type: none"> ▶ Availability of institutes like NIFTEM, NID, Kurukshetra University, NDRI etc. ▶ Educated manpower with technical education. <p>Locational advantage</p> <ul style="list-style-type: none"> ▶ Well connected to NCR and other major cities. 	<p>Low Productivity</p> <ul style="list-style-type: none"> ▶ Lack of focus on mechanization, technology adoption, absence of a robust MSME ecosystem and entrepreneurship resulting in low factor productivity. <p>Policy Lacunae</p> <ul style="list-style-type: none"> ▶ Lack of knowledge/awareness on policies and incentives/subsidies provided to the enterprises. <p>Infrastructure Bottlenecks</p> <ul style="list-style-type: none"> ▶ Lack of proper roads, sewerage and electricity in some of the major industrial areas. ▶ Lack of a spatially embedded cluster development and management plan resulting in cluster underperformance ▶ A number of SEZs are partially occupied ▶ <p>Imbalanced Growth: Concentration of industries at three districts Faridabad, Gurgaon, Karnal and Panipat.</p> <p>Finance access: Inadequate Institutional credit flow leading to unequal lending.</p> <p>Market access: Absence of market intelligence and limited to local markets & lack of exposure to different markets.</p> <p>Technology access: Limited technological advancements and up gradation.</p> <p>Testing: Lack of proper material testing and certification centres</p>

	Skilled Manpower: Growing projected skill gap of skilled and unskilled labour
Opportunities	Threat
<ul style="list-style-type: none"> ▶ Large infrastructure projects like DMIC and KMP industrial corridor presents state with huge potential in terms of backward linkages ▶ Proximity of key locations in the state to already established industrial and consumption hubs like Delhi and Baddi provide great opportunity for spill-over effect. The results of this is already visible as Jind district is added in NCR region ▶ Robust and comprehensive government schemes: Central and state government have notified several schemes for MSMEs. Creating awareness and educating the benefits of these schemes will attract more investors. ▶ Establishment of common facility centres in clusters for improving the productivity, branding etc. ▶ Tie up with financial institutions and lenders for providing access to credit due to the MSMEs. ▶ Create marketing platforms through digital space. 	<ul style="list-style-type: none"> ▶ High level of competition from similar MSMEs in the neighbouring states ▶ Rapid changes in business environment ▶ Fragmentation of existing value chains: ▶ Absence of major consumption/demand driver other than automobile and engineering sector. ▶ Absence of an ecosystem for venture support. ▶ With the implementation of free trade agreement in the coming years (ASEAN), states with a low value addition and weaker value chains are likely to be affected, so there is a need for dedicated sector focused value chain. ▶ Complicated documentation procedures to access financial aid drive away potential entrepreneurs. ▶ Irregular payment of dues.



07

Priority sector
identification

7. Priority Sector Identification

The rationale of this analysis is to channelize the efforts of the government in developing high potential industries in the state by identifying and targeting a strategic and competitive industry portfolio. The underlying rationale of identifying additional priority sectors (over and above the focus sectors of the state as given in Haryana EPP 2015 and detailed in chapter 3 of this report) is to offer significant future growth opportunities, in purely economic terms, limited resources (mainly capital) can be put to highest possible dividends. The following approach has been adopted:

- ▶ Recent Trends: Government of India's Make in India initiative and Haryana Enterprise Promotion Policy 2015 to identify sectors high on policy and regulatory push
- ▶ Spatial Industry Analysis: Location Quotient to identify sectors high on economic specialization and export potential
- ▶ Cluster level activity: Cluster mapping in 3 stages- Sunrise, Growth and Maturity to identify clusters high on critical mass and interventions under MSE-Cluster Development Programme (GoI)

7.1 Identification of Priority Sectors

Multiple level data analysis was undertaken for 24 industries at a country and state level to identify potential industries. These industries were assessed on a broad set of metrics to shortlist key industries. Each of the industries was studied across multiple elements (based upon data analysis) including:

- ▶ Element 1: Focus and priority sectors identified by state Government and central Government
- ▶ Element 2: Extent of industrial specialization and export potential: Location Quotient
- ▶ Element 3: Cluster level interventions under MSE-Cluster Development Programme (GoI)

Using the below mentioned framework sector detailed analysis has been conducted on the identified set of sectors.

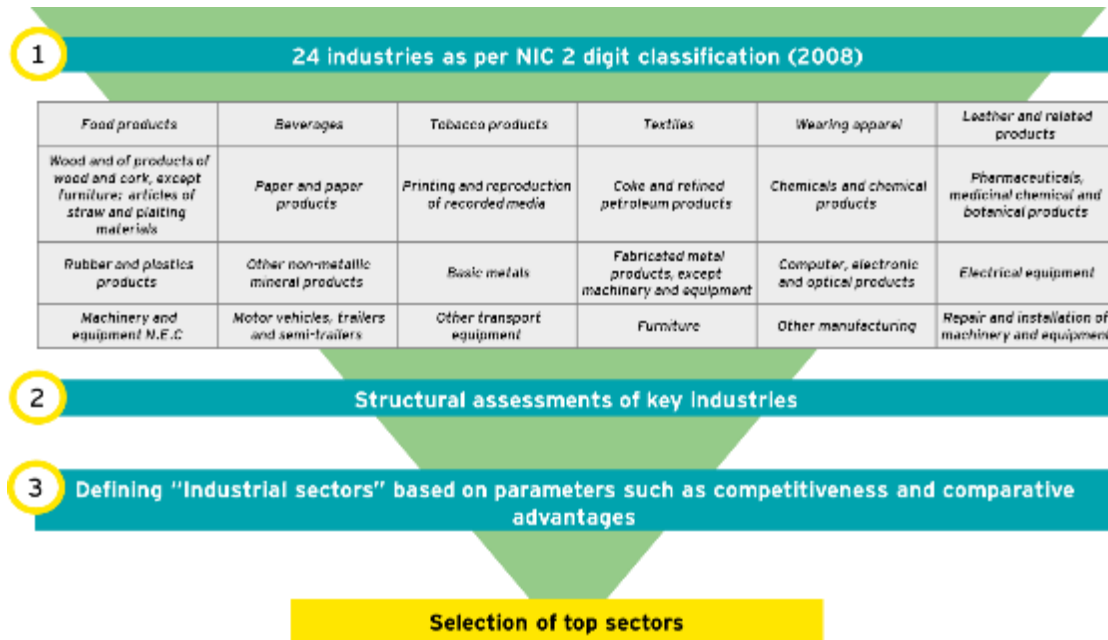


Figure 28 Approach for identification of potential sectors

Source: EY analysis

Overall findings: In order to provide analytical support to the focus sectors identified by the state (as mentioned in the Haryana EPP 2015) and the sectors with a strong central Government policy push via National Manufacturing Policy and Make in India initiative, a spatial industrial analytical tool- Location quotient has been performed on all districts to arrive at the most competitive set of industries for Haryana.

The analytical and secondary research findings have further been validated through primary visits in the selected districts.

Using this bespoke secondary and primary research, about seven priority sectors for the state have been identified, as mentioned below:

1. Agro-based Industries
2. Textiles and Apparels
3. Automobile and Auto Components Manufacturing
4. Engineering
5. Chemicals & Chemical Products and Petrochemical
6. Electronics & IT/ITeS
7. Leather, Footwear and Accessories

Several initiatives such as cluster development, vendor development etc. can be undertaken to further enhance the competitiveness of MSMEs in these sectors.

7.1.1 Spatial Industry Analysis: Location Quotient Analysis

Quantifying how concentrated a particular industry, cluster, is, in a region (district) as compared to the state in terms of number of units. A value of location quotient more than 1 signifies that the particular district has higher contribution as compared to the state as a whole and can qualify as an exporter in that particular district.

Location Quotient Analysis:

Objective:

- ▶ By assessing the number of units in the district relative to number of units in state for that sector, LQ more than 1, makes a sector eligible as an export oriented sector

Data set:

- ▶ Time period: 2010-11 for Haryana
- ▶ Economic parameter: Number of units
- ▶ Data set: NIC- 2 digit classification (10 to 33)
- ▶ Data source: Mot Mc Donald Survey

Findings:

- ▶ Manufacturing sectors with an LQ higher than 1, with a significant overlapping in every district, have been identified as the focus sectors (as shown in table 10). The detailed results have been given in the annexure.

The industrial specialization identified in the location quotient is done as per the NIC classification of products in manufacturing (2007-08) The broad NIC classification of products combined with focus sectors where possible is provided below:

Sector	Sub activities
Agro & Food processing sector	<ul style="list-style-type: none"> ▶ Manufacturing of dairy products ▶ Processing and value addition of vegetables and fruits ▶ Manufacturing of beverages such as production of fruit and vegetables, milk based drinks etc. ▶ Manufacturing of oils and fats
Auto components & Engineering	<ul style="list-style-type: none"> ▶ Transport equipment ▶ Motor vehicles ▶ General and special purpose machinery ▶ Fabrication of metals
Footwear	<ul style="list-style-type: none"> ▶ Manufacturing of footwear
Electronics & software	<ul style="list-style-type: none"> ▶ Computers and hardware ▶ Communication equipment ▶ Consumer electronics ▶ Testing. Navigating and control equipment ▶ Watches and clocks

Pharmaceutical	<ul style="list-style-type: none"> ▶ Medicinal and botanical products ▶ Chemicals
Chemicals	<ul style="list-style-type: none"> ▶ Fertilizers ▶ Coke ▶ Refine petroleum
Textiles	<ul style="list-style-type: none"> ▶ Spinning, weaving and finishing ▶ Manufacturing of carpets, rug, rope etc. ▶ Manufacturing of Readymade garments
Wood Products	<ul style="list-style-type: none"> ▶ Manufacture of plywood, veneer sheets etc. ▶ Manufacture of flush doors and other plywood products etc. ▶ Manufacture of cork and other related products
Non-metallic mineral	<ul style="list-style-type: none"> ▶ Manufacture of glass& related products, porcelain and ceramic products, cement etc.
Basic metals	<ul style="list-style-type: none"> ▶ Manufacture of basic iron and steel, precious and other non-ferrous metals

Based on the categorization of NIC, the location quotient analysis has been performed and the top three priority sectors in each district based on the concentration of units is provided below. Potential clusters could be developed from these sectors:

Table 10 Location Quotient Analysis for Identification of Potential Sectors

District	Industrial Specialization and Export Orientation: Location Quotient	District	Industrial Specialization and Export Orientation: Location Quotient
Ambala	Scientific instruments	Kurukshetra	Food products
	Pharmaceutical and medicinal chemical		Paper and paper products
	Electronic and optical		Fabricated metal
Bhiwani	Chemical and chemical products	Karnal	Food and beverages
	Food and beverages		Pharmaceutical, medicinal chemical
	Non-metallic mineral products		Leather and its related products
Gurgaon	Apparels	Kaithal	Food products

District	Industrial Specialization and Export Orientation: Location Quotient	District	Industrial Specialization and Export Orientation: Location Quotient
	Automobile		Wood based
	Leather & related		Engineering
Hisar	Leather & related	Fatehabad	Food products
	Food products		Leather and its related products
	Metals		Engineering (Machinery and equipment)
Jind	Automobile	Faridabad	Automobile
	Wood products		Engineering
	Food and beverages		Fabrication of metals
Jhajjar	Coke and petroleum products	Mewat	Non-metallic mineral products
	Non-metallic mineral products		Fabrication of metals
	Rubber and plastic products		Automobile
Panchkula	Electronics	Narnaul	Food products and beverages
	Auto and engineering		Non-metallic mineral products
	Pharmaceuticals and medicinal		Fabricated metals
Panipat	Textiles	Rewari	No significance industrial presence
	Apparels		
	Electronics and optical		
Rohtak	Coke and refine petroleum products	Sirsa	Textiles
	Agro based (Food products)		Chemicals
	Automobile		Wood and its related products

District	Industrial Specialization and Export Orientation: Location Quotient	District	Industrial Specialization and Export Orientation: Location Quotient
Sonipat	Agro based (Food products)	Yamunanagar	Wood products
	Printing		Metals
	Auto and engineering		Fabrication of metals

For detailed list of Location Quotient Analysis, refer annexure 1

Sectors	Central Government policy push	State Government Focus (EPP 2015)	Haryana's competitive strength
Auto, Auto Components & Light Engineering	↑	↑	↑
Agro-based, Food Processing & Allied Industry	↑	↑	↔
Textiles / Apparel / Knitting / Embroidery / Technical textiles	↑	↑	↑
Footwear & Accessories	↑	↑	↔
Electronics & IT/ITES	↑	↑	↑
Defence and Aerospace Manufacturing	↑	↑	↑
Renewable Energy & Solar Parks	↑	↑	↑
Pharmaceutical & Chemical Industry	↑	↑	↔
Metals and Metallic Products	↑	↔	↑
Heavy Engineering	↑	↔	↑

Figure 29 Summary of list of potential industries

Source: EY Analysis

Final list of industries identified are as follows:-

- ▶ *Major focus sectors with high on competitive strength for Haryana with a well-developed ecosystem and cluster mass. These can be categorised as Matured Sectors.*
 - ▶ Automobile and auto-component manufacturing
 - ▶ Textiles & Apparels
 - ▶ Leather, Footwear and Accessories
 - ▶ Agri-implements
 - ▶ Pharmaceutical and Chemicals

- ▶ *Existing sectors with a strong potential in terms of market growth and physical footprint but need further strengthening of ecosystem (Sunrise and Growth Sectors)*
 - ▶ Electronics & IT/ITES
 - ▶ Engineering such as precision engineering (other than agri-implements)
 - ▶ Agro and Food processing

7.1.2 Cluster level interventions under MSE-Cluster Development Programme (GoI)

- ▶ In order to categorise the priority sectors, a cluster-level categorization based on the level of interventions and initiatives taken under Government of India's MSE-CDP has also been done. The basis for categorization of manufacturing sector clusters (identified by Government of Haryana as on 31-12-15) is given below: Sunrise Stage: Relevantly new clusters where soft and hard infrastructure interventions (common facility centre) in terms of DSR and DPR preparation is yet to be initiated. The list of sunrise clusters also includes an additional list of high potential clusters which EY has identified for possible interventions.
- ▶ Growth Stage: Emerging clusters of Haryana where significant progress under MSE-CDP has been made (right from DSR preparation to DPR completion).

Sunrise Stage-New Clusters		Growth Stage- Emerging Clusters		Maturity Stage- Advanced Clusters	
Cluster	Status	Cluster	Status	Cluster	Status
Electronics Cluster, Panchkula	<ul style="list-style-type: none"> ▶ Presence of PSUs such as Bharat Electronics and HMT, the area has about 200-300 MSMEs in engineering and auto sectors. 	Scientific Instruments Clusters, Ambala	<ul style="list-style-type: none"> ▶ Very Strong footprint: 600 units ▶ DSR prepared under MSE-CDP and approved by GoI. 	Readymade Garments Cluster, Gurgaon	<ul style="list-style-type: none"> ▶ Very Strong footprint: 1300 units ▶ In-principle approval received for the DPR (as on 15.05.13)
Rice Cluster, Kaithal	<ul style="list-style-type: none"> ▶ Strong footprint: around 200 	Fitness and Surgical Equipment	<ul style="list-style-type: none"> ▶ Moderate footprint: 72 units 	Footwear Cluster, Jhajjar	<ul style="list-style-type: none"> ▶ Strong footprint: 125 units

	micro and small rice shelling units in the district.	Cluster, Bhiwani	▶ Detailed Project Report under MSE-CDP under preparation		▶ In Bid Stage - Bids invited for machinery
Carpet Cluster, Panipat	<ul style="list-style-type: none"> ▶ Very Strong footprint: About 300 micro and small units in the area. ▶ Carpet cluster yet to be notified. 	Bright Bar Steel Cluster, Faridabad	<ul style="list-style-type: none"> ▶ Strong footprint: 225 units ▶ DSR prepared under MSE-CDP and submitted to Gol for approval 	Print and Pack Cluster, Karnal	<ul style="list-style-type: none"> ▶ Very Strong footprint: 300 units ▶ Production Stage: State Gov. grant released (worth INR 1.5 crores) and Gol share (worth INR 7.8 crores)
Fabrication Cluster, Rewari	<ul style="list-style-type: none"> ▶ Strong footprint in terms of no. of units ▶ SPV formation yet to be completed under MSE-CDP Scheme. 	Fabrication and Fitting Cluster	<ul style="list-style-type: none"> ▶ Strong footprint: 120 units ▶ DPR prepared as part of MSE-CDP and case sent to Gol for in principle approval 	Agriculture Implement Cluster, Karnal	<ul style="list-style-type: none"> ▶ Moderate footprint: 73 units ▶ Construction Stage
Home Furnishing Textile Cluster, Panipat	<ul style="list-style-type: none"> ▶ Very Strong footprint: 1300 units ▶ SPV formation yet to be completed under MSE-CDP Scheme. 	Leather and Leather Product Cluster, Gurgaon	<ul style="list-style-type: none"> ▶ Strong footprint: 185 units ▶ DPR under preparation as part of MSE-CDP 	Pharmaceutical Cluster, Karnal	<ul style="list-style-type: none"> ▶ Moderate footprint: 70 units ▶ Construction Stage
Dyeing Cluster, Faridabad	<ul style="list-style-type: none"> ▶ Strong footprint: 140 units ▶ Preliminary application submitted to Gol for approval to prepare a detailed sector 	Auto Tractor Parts Cluster, Panchkula	<ul style="list-style-type: none"> ▶ Very Strong footprint: 304 units ▶ DSR prepared under MSE-CDP and submitted to Gol for approval 	Stainless Cluster, Sonapat	<ul style="list-style-type: none"> ▶ Moderate footprint: 72 units ▶ Tender Stage: Purchase Committee convened for inviting tenders

	report (DSR).				
Printing and Publishing Cluster, Manesar	<ul style="list-style-type: none"> ▶ Moderate footprint:35 units ▶ Preliminary application submitted to Gol for approval to prepare a detailed sector report (DSR). 	Quilt and allied Product Cluster, Panipat	<ul style="list-style-type: none"> ▶ Very Strong footprint : 500 units ▶ DPR under preparation as part of MSE-CDP 	Engineering Cluster, Yamunagar	<ul style="list-style-type: none"> ▶ Strong footprint: 133 units ▶ In-principle approval received by Gol
Dairy Processing Cluster, Karnal	<ul style="list-style-type: none"> ▶ Strong footprint: 200 units ▶ Preliminary application submitted to Gol for approval to prepare a detailed sector report (DSR). 	Foundry Cluster, Panipat	<ul style="list-style-type: none"> ▶ Moderate footprint:30 units ▶ DPR under preparation as part of MSE-CDP 	Plywood Cluster, Yamunagar	<ul style="list-style-type: none"> ▶ Strong footprint: 250 units ▶ In-principle approval received by Gol
Plastic Packaging Cluster, Karnal	<ul style="list-style-type: none"> ▶ Moderate footprint: 60 units ▶ Preliminary application submitted to Gol for approval to prepare a detailed sector report (DSR). 	General Engineering Cluster, Rohtak	<ul style="list-style-type: none"> ▶ Strong footprint :200 units ▶ DSR prepared as part of MSE-CDP and submitted for Gol Approval 		
Signage and Advertisement Cluster, Karnal	<ul style="list-style-type: none"> ▶ Moderate footprint: 70 units ▶ Preliminary application submitted to Gol for approval to prepare a detailed sector 	Clique Print and Pack Solution Cluster, Sonapat	<ul style="list-style-type: none"> ▶ Moderate footprint:37 units ▶ DSR preparation under MSE-CDP in progress 		

	report (DSR).				
		Woollen Knitted Cluster, Sirsa	<ul style="list-style-type: none"> ▶ Moderate footprint:35 units ▶ DSR prepared as part of MSE-CDP and submitted for Gol Approval 		
		Steel Utensils Cluster/Metal Cluster	<ul style="list-style-type: none"> ▶ Strong footprint :175 units ▶ DPR prepared as part of MSE-CDP and case sent to Gol for in-principle approval 		

7.2 Inferences from Primary Research

To bolster and support the secondary data findings in identifying the priority sectors and the nature of interventions required in the high potential clusters of Haryana, EY team visited 13 major districts across the state and interacted with number of diverse stakeholders. These include government officials, DIC officials, MSMEs, industry associations, academicians and sector experts to understand the needs and requirements of the MSMEs. Some of the common cluster related interventions required by the MSMEs are modern production facilities, tool room, testing centre, processing lines, productivity improvement etc.

Adopting a bespoke methodology of primary (interactions with the industrial associations/MSME units & DICs) and secondary research (location quotient framework and the focus & traditional sectors identified by the state and central government), following are some of the sectors/areas in which cluster interventions are required:

▶ Panchkula

There are two types of clusters existing in the district. Due to the presence of PSUs such as Bharat Electronics and HMT, the area has about 200-300 MSMEs in engineering and auto sectors. As per the discussions with state president and Panchkula Chairperson of HCCI, there is a need for small tool room and a common facility centre for the mentioned sectors.

Intervention: Two clusters could be setup under different schemes such as Mini cluster scheme and MSE CDP scheme.

▶ **Karnal**

The district is known for its agriculture produce. The district has active MSME units and has presence of various clusters. After the discussion with stakeholders, five potential clusters have been identified. These clusters are very active and SPVs for all these clusters have already been formed. The following are five clusters which have been identified for cluster development:

1. Agri implements
2. Bakery cluster
3. Dairy cluster:
4. Plastic packaging cluster
5. Signage cluster

Intervention: Agri implements and bakery cluster consists of micro and small units. Therefore, these requirements for these clusters can be undertaken through mini cluster scheme. The requirements for other three clusters have been mapped and are required be undertaken through MSE CDP.

▶ **Kaithal**

Kaithal is also known for its rice and agri implements production. There are about 200 micro and small rice shelling units in the district. As per HICCI, there is a need for common facility centre and testing facilities for these rice shelling units and foundries.

Intervention: A potential rice cluster could be setup in this area. However, more discussions need to be conducted with the associations for formation of cluster.

▶ **Gurgaon**

The district has large number of wearing apparels and footwear manufacturing units. There are more than 500 units in the area. Based on the discussions with GM DIC Gurgaon, there is a need for development of common facility centre.

Intervention: A Readymade garment cluster has already been notified and also has presence of large number of footwear manufacturers. In conjunction with GM DIC Gurgaon, requirements shall be formulated for the cluster.

▶ **Panipat**

The district is known as textile capital of the state. The panipat cluster manufactures carpets, rugs, shawls etc. There are about 300 micro and small units in the area which require facilities for improving the productivity of the units.

Intervention: The carpet cluster is yet to be notified. More discussions need to be conducted with the associations for formation of cluster.

▶ **Faridabad**

The district is known for presence of a large number of engineering (mainly auto components), fabrication and textile dying units. There are over 10000 micro and small units in the area. There is an urgent need for development of common facility centres in the district for the major industries.

▶ **Ambala**

The district has sizeable number of units which manufactures scientific instruments. Scientific instruments cluster is also one of the traditional clusters identified by the state government and mentioned in the EPP 2015.

Intervention: A possible common facility centre/testing centre for the equipment can be established in the cluster.



08

Action plan

8 Action plan for priority sector development

To mature into a sustainable industrial state, the identified priority industrial sectors need to be given a strategic direction. With Make in Haryana initiative and Government's emphasis on development of priority sectors, it is important to develop an action plan with goals ranging from short term to long term.

8.1 Action plan with Strategic Initiatives: Short, Medium and Long Term

Table 11 Action Plan with Strategic Initiatives: Short, Medium and Long Term

Short Term	
1	Launch awareness campaigns and provide information on various initiatives and schemes undertaken by the government.
2	Enhance awareness of entrepreneurs on benefits under EPP 2015 by organizing cluster level awareness programs.
3	Create knowledge base in DICs that would promote ancillarization and business services.
4	Identify and provide list of business development service providers.
5	Sector focused vendor development programs and creating market linkages.
6	Create an online platform for selling and buying of goods for MSMEs.
7	A real time monitoring interface - An ICT intervention where the investor can access the data regarding approvals, incentives etc. in terms of ease of doing business.
8	Dedicated value chain strengthening-sector specific programmes for increasing value addition, institutionalizing value chain mapping across all the sectors.
9	Identify the key challenges and issues in these sectors and create actionable for addressing these challenges.
10	Identification of potential clusters for the state.
Medium Term	
1	Review and restructure the industries department.
2	Capacity building of the DIC and the industries department staff.
3	Intervention for vendor development to enable vendors (mainly MSMEs) meet required quality standards of anchor units.
4	Hard and Soft interventions for the identified clusters.
5	Innovation consortium through collaborative funding to create innovation platforms for industries, government and academia to interact.
6	Development of quality marking centers to cater to the MSMEs.
7	Engage with FIs and create linkages for the MSMEs.
Long Term	
1	Hard and Soft interventions to cover all the districts and sector agglomerations.
2	Entrepreneurship development.
3	Design suitable training courses and provide skill development to meet the future needs.

8.2 Key Interventions

Every strategic intervention, as explained above, will have its own support requirements. Some of the soft and hard interventions proposed below for achieving the desired objectives mentioned in the action plan.

Table 12 Infrastructure based Interventions

Specific Intervention	Description	Proposed
Hard Interventions		
Common facility centres	<ul style="list-style-type: none"> ▶ Specialized centres providing services like modern machining, testing, training, raw material depot, effluent treatment and complementing production processes, etc. 	<ul style="list-style-type: none"> ▶ Common facility centres and proposed sector clusters ▶ Sector Focus: Around clusters ▶ District Focus: Every town (in every district) to be covered
Centres for Testing and Calibration	<ul style="list-style-type: none"> ▶ Centres to cater the testing and calibration needs of the Micro, Small and Medium Enterprises (MSMEs) in the fields of Electrical, Mechanical, Chemical and Metallurgical. manufacturing, fully equipped with high accuracy precision equipment and instruments 	<ul style="list-style-type: none"> ▶ Centres for Testing and Calibration (in various sectors) based clusters/ concentration ▶ Quality marking centres in all districts
Mini Tool Rooms	<ul style="list-style-type: none"> ▶ Mini Tool Rooms to be developed across the sectors to support both existing and proposed clusters 	<ul style="list-style-type: none"> ▶ A detailed roadmap for development of tool rooms and other support infrastructure for existing and upcoming clusters ▶ Tool rooms will act as a hub for manufacturing value chain and a number of activities ranging from design to incubation support
Creation of world class infrastructure	<ul style="list-style-type: none"> ▶ Up gradation of existing and creation of industrial infrastructure at industrial parks, estates and clusters ▶ Plug and play model of industrial infrastructure to be promoted through private participation ▶ Flatted factories (for MSMEs) ▶ Upgradation of existing power, roads and sewerage systems 	<ul style="list-style-type: none"> ▶ Priority to be given to development of infrastructure around the nodes of Districts and around NCR ▶ Creation of cold chains ▶ The existing industrial infrastructure to be upgraded through industrial parks ▶ Setting up new CETPs for dyeing and electropolymerization
Soft Interventions		

Specific Intervention	Description	Proposed
Skill Development	<ul style="list-style-type: none"> ▶ Imparting of skill and technical know-how with strong industry- academia interface ▶ Industry focussed training curriculum ▶ Strong sectoral orientation and ICT interface 	<ul style="list-style-type: none"> ▶ Conduct survey for ga requirements of the in ▶ Conduct skill gap stud ▶ Design curriculum and training institutes for s
Value Chain Strengthening	<ul style="list-style-type: none"> ▶ Value chain mapping, as a practice, across industries towards productivity enhancement and global integration 	<ul style="list-style-type: none"> ▶ Value chain strengthened programmes for incree identified sectors
Efficiency of MSMEs through ICT enablement	<ul style="list-style-type: none"> ▶ Operational and process based efficiency in MSMEs through digitization and information and communication technology interface ▶ Online platform for finance and market visibility and access 	<ul style="list-style-type: none"> ▶ Currently there is very by increasing the adop productivity gain can b increased efficiencies. ▶ Create e market place by tie up with e-comm ▶ Develop a portal/App v data and also check th etc.
Capacity development of the staff	<ul style="list-style-type: none"> ▶ Some of the DICs lack in providing information and services to the entrepreneurs. ▶ Some of the staff are not aware of the schemes and incentives provided by the government 	<ul style="list-style-type: none"> ▶ Review the institutional and DICs ▶ Conduct capacity build
Entrepreneurship development	<ul style="list-style-type: none"> ▶ No specific support for development of entrepreneurs 	<ul style="list-style-type: none"> ▶ Create a pool of mento development. The list Anchor units, Research Providers etc.
Capacity development of the MSMEs	<ul style="list-style-type: none"> ▶ Business Development Services providers support MSMEs in improving the productivity, branding and marketing, enhancing quality etc. 	<ul style="list-style-type: none"> ▶ Provide a list of BDS p different areas such as audits, marketing, qua ▶ Tie up the associations institutes for inputs on advancement
Financing for MSMEs	<ul style="list-style-type: none"> ▶ The financing of MSMEs to be done through consortiums/SPVs/ industrial associations ▶ Banks/financial institutions to be educated about the government schemes for financing 	<ul style="list-style-type: none"> ▶ Launch awareness pro the financial schemes ▶ Create linkages betwe providing loans
Awareness	<ul style="list-style-type: none"> ▶ Awareness campaigns in all districts and 	<ul style="list-style-type: none"> ▶ Conduct sector specifi

Specific Intervention	Description	Propos
campaigns	associations to educate about the government schemes, incentives, approval processes and procedures etc.	benefits and advantag

8.3 Potential Areas of Impact

With the implementation of the above interventions, there would be an impact on the economic and societal parameters in a direct or indirect way. There are some interventions which will have a direct impact owing to a higher multiplier effect and positive externalities while others will have an indirect, albeit a significant one. The table below shows the economic and societal impact created on MSMEs as a whole and also on the priority sectors in Haryana.

Table 13 Thematic Interventions and Potential Areas of Impact

Thematic Interventions		Dynamic MSMEs	Impact on priority sectors
Approach →			
Outcome/Impact ↓			
Economic Impact	Impact on Manufacturing GSDP and Output		
	Increases productivity		
	Trade Competitiveness (Export Potential)		
	Stimulates investment		
	Employment Generation and enterprise creation		
Societal Impact	Broadens empowerment		
	Stimulates innovation		
	Promotes regional balance		
	Builds workforce capabilities		

	Indirect Impact
	No Significant Impact
	Significant impact

List of stakeholder consulted for preparation of the report

S.no	Date	List of stakeholders	Name of the organization
1	05 Jan	Mr. Vinay Taneja, Mr. Nishant Chawla	Plastic Packaging Cluster, Karnal
2	16 Jan	Mr. RC Dahra, Consultant	Department of Industries & Commerce
3	18 Jan	Mr. Pankaj Bharti, Mr. Himanshu Bharti	Dairy Cluster, Karnal
4	30 Jan	Mr. Ashok Sachedeva, Mr. Sanjeev (Consultant), Mr. Amit Ahuja	Bakery cluster Karnal
5	01 Feb	Mr. Pritam Singh Sachdeva, President	Haryana Chamber of Commerce & Industry, Panipat
6	01 Feb	Mr. Bhim Rana, Representative	Panipat Dyers Association
7	02 Feb	Mr. S.K. Katore, President, Rohtak	IDC Industries Association
8	09 Feb	Mr. Rohit Gupta,	Goodrich Cereal
9	14 Feb	Mr. Rajinder Kumar Rana,	JD, DIC Sonapat and Panipat
10	14 Feb	Mr. Bhagmal,	JD, DIC Karnal
11	14 Feb	Mr. Major Singh,	MSME DI, Karnal
12	16 Feb	Mr. Naresh Saluja, Mr. Virender Dhingra, Mr. Sahil Mangla, Mr. Shubham	Signage Cluster, Karnal
13	17 Feb	Mr. Satya Narayan Singh,	JD, DIC Gurgaon
14	17 Feb	Mr. Rajender Singh Shankla`	JD, DIC Rohtak

S.no	Date	List of stakeholders	Name of the organization
15	21 Feb	Mr. Wazir Singh	Additional Director, Department of Industries & Commerce
16	22 Feb	Mr. Deepak Garr, Secretary	Haryana Chamber of Commerce & Industry, Kaithal
17	22 Feb	Mr. Satpal Datterwal, President	Industrial Association, Narwana, Jind District
18	22 Feb	Mr. Jagdish Rai Jindal, General Secretary	Hissar Industrial Association, Hissar
19	23 Feb	Jaya Goel, Representative	ISME of India, Faridabad Small Scale Association
20	24 Feb	Mr. Vishnu Goel, President	Haryana Chamber of Commerce & Industry
21	25 Feb	Mr. Jatrana	Joint Director, Bahadurgarh
22	27 Feb	Amit Agarwal, General Secretary	Kundli Cold Storage warehousing association
23	27 Feb	Mr. Jitender Malik	Haryana Carpet Manufacturers Association
24	08 Mar	Mr. Raman Saluja, Mr. Satish Chopaul	Plywood association, Engineering association at Yamunanagar
25	17 Mar	Representatives	Engineering association, Faridabad



ANNEXURES

Annexure 1 - Location Quotient Analysis

NIC-Code	Manufacturing Sector /District	Ambala	Bhiwani	Gurgaon	Hisar	Jind	Jhajjar	Kurukshetra
10	Manufacture of food products	1.19	1.17	0.22	1.39	1.05	0.30	3.00
11	Manufacture of beverages	0.94	2.28	0.39	1.51	0.94	0.63	1.00
13	Manufacture of textiles	0.08	0.81	0.25	0.14	0.05	0.18	0.00
14	Manufacture of wearing apparel	0.76	0.73	11.62	0.35	0.00	0.66	0.00
15	Manufacture of leather and related products	1.06	1.08	5.82	3.37	0.22	0.36	0.00
16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	0.44	0.39	0.14	1.21	2.22	0.20	1.00
17	Manufacture of paper and paper products	0.94	0.21	2.39	1.10	0.69	1.42	1.00
18	Printing and reproduction of recorded media	1.54	0.00	1.82	0.81	0.44	1.07	0.00
19	Manufacture of coke and refined petroleum products	1.05	0.36	1.87	0.55	0.91	3.90	0.00
20	Manufacture of chemicals and chemical products	0.81	4.20	0.68	1.31	0.64	1.84	0.00
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	2.39	1.68	1.38	1.02	1.28	1.22	0.00
22	Manufacture of rubber and plastics products	0.63	0.57	1.94	0.87	0.30	3.37	0.00
23	Manufacture of other non-metallic mineral products	0.62	2.29	0.11	1.18	1.04	3.71	0.00
24	Manufacture of basic metals	0.80	0.91	0.76	1.62	0.52	0.90	0.00
25	Manufacture of fabricated metal products, except machinery and equipment	0.40	0.61	0.73	0.99	1.05	0.42	1.00
26	Manufacture of computer, electronic and optical products	2.16	0.39	4.97	0.07	0.16	0.58	0.00
27	Manufacture of electrical equipment	2.10	0.66	1.70	1.44	0.57	1.16	0.00
28	Manufacture of machinery and equipment n.e.c	0.57	0.37	1.36	0.53	1.09	0.80	0.00
29	Manufacture of motor vehicles, trailers and semi-trailers	0.30	0.14	4.38	0.29	1.78	1.07	0.00
30	Manufacture of other transport equipment	1.14	0.00	3.47	0.93	3.32	0.00	0.00
32	Other manufacturing	10.69	0.76	0.60	0.10	0.04	0.19	0.00

NIC-Code	Manufacturing Sector /District	Faridabad	Mewat	Narnaul	Panchkula	Panipat	Rewari
10	Manufacture of food products	0.23	0.44	1.10	0.82	0.30	0.00
11	Manufacture of beverages	0.00	1.17	2.49	0.80	0.47	0.00
13	Manufacture of textiles	0.00	0.13	0.03	0.08	6.92	0.04
14	Manufacture of wearing apparel	0.00	0.41	0.25	0.19	1.20	0.00
15	Manufacture of leather and related products	0.00	0.00	0.25	0.63	0.59	0.00
16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	0.49	0.55	0.81	0.81	0.20	0.06
17	Manufacture of paper and paper products	0.01	0.00	0.00	2.61	0.77	0.00
18	Printing and reproduction of recorded media	0.00	0.00	0.33	2.65	0.59	0.00
19	Manufacture of coke and refined petroleum products	0.00	0.00	0.00	2.04	0.40	0.00
20	Manufacture of chemicals and chemical products	0.32	0.25	0.15	0.90	0.56	0.02
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	0.00	1.25	0.13	2.70	0.24	0.00
22	Manufacture of rubber and plastics products	2.04	0.00	0.50	0.70	0.25	0.01
23	Manufacture of other non-metallic mineral products	0.08	2.15	2.57	0.71	0.08	0.03
24	Manufacture of basic metals	1.24	0.71	0.49	0.71	0.20	0.00
25	Manufacture of fabricated metal products, except machinery and equipment	2.44	1.97	1.66	1.16	0.21	0.02
26	Manufacture of computer, electronic and optical products	0.07	0.00	0.36	2.71	1.60	0.00
27	Manufacture of electrical equipment	1.34	0.00	0.19	1.84	0.15	0.01
28	Manufacture of machinery and equipment n.e.c	2.14	0.24	0.29	1.70	0.41	0.01
29	Manufacture of motor vehicles, trailers and semi-trailers	2.34	1.87	0.77	1.03	0.02	0.00
30	Manufacture of other transport equipment	0.00	0.00	0.58	2.58	0.25	0.00
32	Other manufacturing	0.00	0.00	0.00	0.17	0.07	0.00

Annexure 2 - Compendium of Important Schemes

Central Government Schemes	
Access to Finance	<ul style="list-style-type: none"> ▶ Credit Linked Capital Subsidy for Technology Upgradation (CLCS) ▶ Credit Guarantee Scheme (CGTMSE) ▶ Performance and Credit Rating
Access to Technology	<ul style="list-style-type: none"> ▶ Quality Management Standards (QMS) and Quality Technology Tools (QTT) ▶ Lean Manufacturing Competitiveness for MSMEs ▶ Marketing Assistance & Technology Upgradation ▶ Technology and Quality Upgradation Support to MSMEs (TEQUP) ▶ Zero Defect Zero Effect Scheme (ZED)
Infrastructure & Entrepreneurship development	<ul style="list-style-type: none"> ▶ Micro & Small Enterprises Cluster Development Programme ▶ National Awards Scheme (Individual MSEs) ▶ Trade Related Entrepreneurship Assistance and Development (TREAD) for Women ▶ ASPIRE (Scheme for promotion of innovation, entrepreneurship and agro-industry) ▶ Entrepreneurial and Managerial Development of SMEs through Incubators ▶ Assistance to States for developing Export Infrastructure and Allied Activities (ASIDE) ▶ Additional Grant for Apparel Manufacturing Units for Integrated Textile Park ▶ Mega Food Park ▶ Cold Chain
Access to Market	<ul style="list-style-type: none"> ▶ Marketing Development Assistance to MSMEs (MDA-Bar Code) ▶ Building Awareness on Intellectual Property Rights ▶ Design Clinic for Design Expertise to MSMEs Manufacturing Sector (DESIGN) ▶ Market Development Assistance (MDA) ▶ Single Point Registration

State Government Schemes	
Access to Finance	<ul style="list-style-type: none"> ▶ Credit Linked Interest Subsidy Scheme under EPP 2015 ▶ Credit Rating Scheme under EPP 2015 ▶ Electricity Duty Exemption under EPP 2015 ▶ Freight Assistance Scheme under EPP 2015 ▶ Interest Subsidy Scheme under EPP 2015 ▶ Interest Subsidy Scheme for Artisans under EPP 2015 ▶ Stamp Duty Scheme under EPP 2015 ▶ Investment Subsidy on VAT/ SGST under EPP 2015
Access to Technology	<ul style="list-style-type: none"> ▶ Assistance for Environment Compliance Scheme under EPP 2015 ▶ Energy Audit Scheme under EPP 2015 ▶ Testing Equipment Assistance Scheme under EPP 2015 ▶ Assistance for Technology Acquisition Scheme under EPP 2015 ▶ Quality Certification Scheme under EPP 2015 ▶ Safety Audit Scheme under EPP 2015 ▶ Water Audit Scheme under EPP 2015
Infrastructure & Entrepreneurship development	<ul style="list-style-type: none"> ▶ State Mini Cluster Development Scheme ▶ Critical Infrastructure Development Scheme ▶ Employment Generation Subsidy Scheme under EPP 2015 ▶ Start-ups Scheme under EPP 2015 ▶ ASIDE Scheme under EPP 2015 ▶ Industrial Infrastructure Development Scheme under EPP 2015 ▶ Setting of Primary Processing Centres/Collection Centres under EPP 2015
Access to Market	<ul style="list-style-type: none"> ▶ Design Clinic Scheme under EPP 2015 ▶ Market Development Assistance Scheme under EPP 2015 ▶ State Export Award Scheme under EPP 2015 ▶ Handicraft Award Scheme under EPP 2015 ▶ Patent Registration Scheme under EPP 2015 ▶ E-commerce portal for MSMEs Scheme under EPP 2015 ▶ Marketing Promotion Assistance Scheme for the artisans/weavers under EPP 2015

Glossary of Documents

1	Asian Development Bank Report on Vizag- Chennai Industrial Corridor
2	Making Haryana Smart, CII-PwC Report
3	Manufacturing Transformation- Achieving Competitive Advantage in a Changing Global Marketplace, Oxford Economics
4	Manufacturing the future- The Next Era of Global Growth & Innovation, McKinsey & Company
5	IBEF Sector Profile Reports, various years
6	National Manufacturing Competitiveness Index, 2013, Deloitte
7	CII Sectoral Review on Capital Goods Industry, Food Processing Industry
8	Policy documents: Haryana Enterprise Promotion Policy 2015, National Textile Policy, National Manufacturing Policy-2012
9	Understanding Location Quotient, Report by Economic Modelling Scientists Inc. (EMSI)
10	Annual Survey of India Report, various years
11	4th All India MSME Census Report
12	Annual MSME Sector Reports
13	Economic Survey for Haryana, various years
14	Mott Mc Donald industrial survey for Haryana, 2011-12
15	Haryana Enterprise Promotion Policy 2015