

# Growth Dynamics of MSMEs in Punjab with Special Reference to Ludhiana District

Jasmine Kaur\*

## Abstract

The study examines the growth trend in the MSMEs in Punjab, with a specific focus on the Ludhiana district. The secondary data were analysed using mean and measures of dispersion i.e. standard deviation and Coefficient of Variation. The Log-linear model is used to examine the compound annual growth rate in the number of units, employment, fixed investment and production of MSMEs. The growth in the stated variables remained highly significant over a period of 1995–96 to 2020–21 in the Ludhiana district. On the other hand, there was insignificant growth in the number of units of MSMEs units in Punjab during 1995–96 to 2020–21. The study found that micro enterprises are relatively more active in Udyam Registrations as compared to small-scale and medium enterprises in Punjab and Ludhiana district. The study examines the problems faced by MSMEs in Punjab. The study suggested that the state needs to fully utilise its potential for growth in the industrial sector through the development of MSME sector especially in agro-based and other key industries. The state should invest in infrastructure, technological upgradation, and research and developmental activities.

**Keywords:** MSMEs, Punjab, Ludhiana, Growth

## Introduction

The Micro, Small, and Medium Enterprises (MSME) sector in India has emerged as a significant and dynamic sector over the years. This sector has substantially contributed to the Gross Domestic Product (GDP) and plays a pivotal role in the overall economic development of the country. These enterprises serve as auxiliary units that support larger businesses and make significant contributions to the inclusive growth and development of the nation (GOI 2025). Currently, MSMEs in India are

defined as per a composite criteria involving investment in Plant & Machinery/Equipment and Annual Turnover. Table 1 presents the definition of MSMEs in India which has been applicable with effect from 1 April, 2025. This criterion has been developed to be more realistic with time and to provide ease of doing business. The component of annual turnover in the definition aims to help in creating jobs and attracting more investments in the MSME sector. It would also facilitate the ease of conducting business and large number of enterprises will fall in the category of MSMEs. The ability of MSMEs to grow and expand will be aided by the revised definition. Owing to the resulting economies of scale, productivity can increase without the MSMEs losing out on a number of government benefits, such as export promotion, market support, and preferential procurement in the public sector. This supportive environment aims to encourage competition among MSMEs and helps them flourish.

**Table 1: Definition of MSMEs (with effect from April 1, 2025)**

Category	Definition
Micro enterprise	Investment in plant and machinery/equipment does not exceed Rs. 2.5 crore and annual turnover does not exceed Rs. 10 crore.
Small enterprise	Investment in plant and machinery/equipment does not exceed Rs. 25 crore and annual turnover does not exceed Rs. 100 crore.
Medium enterprise	Investment in plant and machinery/equipment does not exceed Rs. 125 crore and annual turnover does not exceed Rs. 500 crore.

Source: Ministry of Micro, Small and Medium Enterprises, Government of India.

\* Assistant Professor, Amity University Punjab, Mohali, Punjab, India. Email: jkaur2@pb.amity.edu

The share of MSME Gross Value Added (GVA) in the country's Gross Domestic Product (GDP) during 2022–23 was 30.1 per cent (MOSPI, 2024). According to the data from the Directorate General of Commercial Intelligence and Statistics (DGCIS), Ministry of Commerce, Government of India, the share of export of MSME specified products in all India exports during 2023–24 was 45.73 per cent. This sector has been instrumental in generating employment opportunities especially in rural and remote areas of the country. As per the data from the Udyam Registration Portal, there were a total registration of 6,46,78,411 MSMEs providing employment to total 27,91,31,881 persons as on 14 June, 2025. This data includes data of informal micro enterprises which are facilitated under Udyam Assist Platform.

The State of Punjab is known for its robust and thriving MSME sector. The MSME sector in Punjab is involved in the manufacturing of auto components, bicycle and its parts, agricultural implements, electrical goods, hand tools, rubber goods, textiles, sports goods, sewing machines, pharmaceuticals, cotton ginning and processing, information technology, electronics system design, and manufacturing, etc. The State is known for the enterprising spirit of its people. A large number of individuals are engaged in the village and cottage industry of Punjab such as pottery, carpentry, processing of pulses and cereals, weaving, repair shops, leather and related products, etc. (ICAI 2022).

According to the NSS 73<sup>rd</sup> Round Survey on MSMEs (2015-16) and the Annual Report of the Ministry of MSME (2022-23), the share of Punjab in the estimated number of micro and small enterprises in India is 2.31 per cent. Punjab is amongst the prominent manufacturing state in India especially in light engineering industry, particularly comprising of bicycles and its parts and components. Punjab contributes 92 per cent to the production of parts and components of bicycle in India and it has a share of 75 per cent in the production of bicycles in India (Punjab Bureau of Investment Promotion, 2022). Furthermore, Punjab contributes 95 per cent to India's woollen knitwear production, 85 per cent to India's sewing machine production, and 75 per cent to sports goods production in India (IBEF, 2024).

There are numerous advantages enjoyed by Punjab which are helpful in the industrial development of the

state such as its strategic geographical location and connectivity to major metro cities, better connectivity, surplus of power, skilled and trained human capital, competitive and cooperative workforce, business-friendly environment, easy market access, etc. Consequently, MSMEs have been developing and becoming major global suppliers. For example, Rockman Industries supplies aluminium castings, auto chains, alloy wheels, etc. to companies such as Hero, TVS, TATA, Mahindra, and Honda, etc. Jagdev Engineering supplies automobile engine parts, steering system parts, etc. to Honda, BMW, Mitsubishi, and Nissan, etc. (Punjab Bureau of Investment Promotion, 2022).

If we take a look at the industrialisation process after Independence in Punjab, it could not perform remarkably as the state had faced severe setback due to the partition of India and Pakistan in 1947 and further due to reorganisation of the region in 1966. The wars of 1965 and 1971 created fear and uncertainty in the minds of the investors which resulted in low levels of investment in the state. However, the economy of Punjab experienced an escalation in the economic growth and the per capita income as compared to the other states and Indian economy as a whole owing to the Green Revolution. This noteworthy achievement has been accredited to the planned development strategy adopted in Punjab (Singh et al., 2002).

The investment in the agriculture sector during the post green revolution period further strengthened the forward and backward linkages in the state which led to the growth of small-scale industries manufacturing agricultural implements and rendering services. Furthermore, the performance of industrial sector in Punjab till the end of the 1980s was better as compared to the Indian economy as a whole. A deceleration in the industrial growth of Punjab was witnessed during the 1990s, when the Government of India had initiated economic reforms relating to liberalisation, privatisation and globalisation. This slowdown in the industrial sector could be due to the deceleration in agricultural growth in Punjab to some extent (Ahluwalia et al., 2008).

The economic reforms of 1991 were expected to bring about new growth opportunities for Punjab. However, experience revealed a deceleration of economic growth post the reform period. The share of manufacturing in State Domestic Product (SDP) declined from 16.27

per cent in 1990-91 to 14.12 per cent in 2014-15. The slowdown of agriculture and manufacturing sector was compensated by the growth of services sector during the given time period. The changes in sectoral growth rates have led to changes in the economic structure of Punjab (Singh, 2016). The state had overstayed in the agriculture sector which led to numerous issues such as rising number of suicides, debt trap, low productivity, shrinking employment, etc. The scholars such as Bhalla and Chadha (1983) had suggested that industrialisation and diversification could pave the way for development in the state. Industrialisation would help avoid the middle-income trap in Punjab.

## Review of Literature

Lewis (1954) suggested the application of labour-intensive techniques of production to achieve steady and smooth economic growth in less developing nations. He was of the opinion that capital project works can be undertaken by human labour with very little capital. In this regard, tiny and small-scale industries should be developed and promoted in Least Developed Countries, where capital and other resources are scarce. He advocated the minimal use of capital intensive techniques only when necessary. Pathak (1970) studied the factors which accounted for the rapid growth of small-scale units in Ludhiana. The study found that there were 168 small-scale units in the hosiery industry before 1947. The growth took place immensely in hosiery industry and non-hosiery group after independence. The non-hosiery engineering group of industry constitute cycle and their parts, automobile parts, sewing machine and their parts and machine-tools. A number of hosiery units have expanded into large scale units which has also encouraged diversification in the hosiery sector. On the other hand, the cycle industry also experienced expansion in its growth because of inducement measures undertaken by the government. The study found that among 106 parts for sewing machine, nearly 100 parts were manufactured at local level. The machine-tool industry developed mainly through derived demand. The paper explained how the community basis of entrepreneurship and policy measures helped in the growth of the manufacturing sector of Ludhiana.

Tewari (1999) assessed the adjustment behaviour of woollen knitwear industrial units of Ludhiana against

two crises, namely, collapse of the Soviet Union which was their primary export market and the policy of globalisation. The industrial units faced a downtrend which lasted for over a period of one year. The export performance of the units improved after the downturn and the medium-scale and large-scale enterprises indulged in diversification to expand the size of market. The paper stressed on the fact that some of the firms performed better than others in the same cluster. The study identified the factors that helped in the recovery of the cluster units. The units that performed effectively had better production and managerial capabilities, which helped them to adapt to more demanding markets.

Singh (2006) examined the state of industrial growth in Punjab during the period from 1980-81 to 2001-02. There was a deceleration of industrial growth in the post-reform period. The paper found that the industrial economy grew at a rate of 7.34 per cent per annum during the period from 1980-81 to 2001-02. The organised industrial sector recorded a growth of 8.4 per cent per annum and the unorganised industrial sector registered a growth of 5.6 per cent per annum during the same period. The period of the study was divided into two sub-periods i.e. pre-reform period from 1980-81 to 1990-91 and post-reform period from 1991-92 to 2001-02. The results indicated that the pre-reform period recorded a high growth rate as compared to the post-reform period. The growth rate of the unorganised industrial sector of the state decelerated at a higher rate than the organised industrial sector. The results also found that the urban enterprises recorded a higher growth rate in the number of enterprises as compared to rural enterprises. The paper identified the reasons behind the deceleration of industrial growth. It had been due to the low investment-Gross State Domestic Product Ratio, lack of domestic and foreign investment, low quality of infrastructure and low level of plan expenditure. This paper has suggested an alternative strategy for reviving the industrial growth. It has suggested to change the organisational structure and to encourage people's participation in the organisation of economic activities. The cooperative system should be promoted which adhere to market rules. Farmers' organisations should be helped by the government in organising, production, processing and marketing activities. The government should provide essential infrastructure and must also help in rural industrialisation based on diversified agriculture.

Jain et al. (2012) examined the technology strategies of manufacturing small and medium enterprises (SMEs) in Punjab. A use-based sector analysis was done by taking into account three categories, namely, durable, non-durable and essential goods. The paper analysed the attitude of the entrepreneurs towards Intellectual Property Rights (IPRs). The study was based on the primary data. A sample of 100 units from nine districts of Punjab was surveyed. An ANOVA model was used for analysing the relations between the nature of industry and technology management strategies adopted by these enterprises. The results indicated that training of workers was the most preferred technology management strategy in Punjab. Besides this strategy, price strategy and technology up gradation came next on priority list. It was found that the SMEs in Punjab are reluctant to file IPRs. The filing of patents is prevalent in the essential goods sector and it is almost negligent in durable and non-durable goods. There is a need to create a favourable environment for IPR through policy reforms and organisational initiatives.

Sahoo et al. (2020) analysed the impact of COVID-19 on the growth, trade and manufacturing activities of MSMEs in India using secondary data. The study found that the mining industry would be most impacted, followed by the manufacturing, construction, trade, lodging, transportation, and financial services sectors. The study predicted that the manufacturing sector might contract by 5–20 per cent, depending on the circumstances. Automobiles, machinery and equipment, textiles, metals and chemical products, and motor vehicles were probably some of the manufacturing industries that were found to be most impacted. The study evidently found that trade, manufacturing, and the MSME sector—all of which significantly contribute to employment and economic growth in India were hardly hit.

Dhaliwal (2024) assessed the support network that the MSME sector in Punjab offers to female entrepreneurs. The study was based on a sample of 204 female entrepreneurs in the MSME sector of Punjab. It investigated the level of assistance that female entrepreneurs receive from their friends, family, and other governmental and non-governmental organisations. The family support network played a major role in fostering women's entrepreneurial potential rather than outside organisations. According to the findings, the vast majority of female entrepreneurs get strong support from their extended families. Instead of depending on external support networks such as banks or government agencies,

these women often turn to their spouses, family members, and relatives for support and guidance. Furthermore, very few women entrepreneurs were aware of government developmental schemes.

## Objectives and Methodology

The present paper aims at investigating the following objectives:

- To examine the growth trends of MSMEs in Punjab and Ludhiana district.
- To look into the status of registration of MSMEs in Punjab.
- To examine the challenges faced by MSMEs in Punjab.

The present study used secondary data for the purpose of analysis. The secondary data relating to the growth in the number of units, employment, fixed investment and production of micro, small and medium enterprises in Punjab were analysed from the period 1995-96 to 2020-21. The data is collected from the Statistical Abstracts of Punjab and annual reports of Directorate of Industries and Commerce, Chandigarh. The secondary data for the same variables in the Ludhiana district were collected from the District Industries Centre, Ludhiana. The secondary data relating to the growth in the number of units, employment, fixed investment and production of micro, small and medium enterprises in Punjab and Ludhiana District were analysed using mean and measures of dispersion i.e. standard deviation and Coefficient of Variation. The trend in the growth rate in the number of units, employment, fixed investment and production of micro, small and medium enterprises were calculated using the Log-Lin Model. This model is similar to any other linear regression model in which the parameters  $\beta_1$  and  $\beta_2$  are linear. The only difference is that the regressand is the logarithm of  $Y$  and the regressor is "time". Hence it is termed as log-lin model.

$$\ln Y_t = \beta_1 + \beta_2 t + ut$$

Such model is an example of semi log model because only one variable (in this case the regressand) appears in the logarithmic form. The slope coefficient measures the constant proportional or relative change in  $Y$  for a given absolute change in the value of the regressor (in this case the variable  $t$ ).

The coefficient of the trend variable in the growth model,  $\beta_2$ , gives the instantaneous (at a point in time) rate of growth and not the compound (over a period of time) rate of growth. The compound rate of growth can be easily computed by taking the antilog of the estimated  $\beta_2$ , and subtracting 1 from it and multiplying the difference by 100 (Gujarati et al., 2011).

## Growth of MSMEs in Punjab

Table 2 indicates the growth of micro, small and medium enterprises in terms of number of units, employment, fixed capital and production in Punjab. The number of units have grown by around 1 per cent during 1996–99. The number of MSMEs have grown at a rate of less than one per cent during 1999–2006. Further, the growth

rate turned negative during 2006–2012, as there were relatively large number of cases of deregistration or cancellation of registration during the mentioned period. The growth rate of number of units turned positive post 2012–13 and rose to around 3 per cent in 2016. The growth rate in employment has been around 2 per cent during 1996–2000. The employment growth rate started declining during 2000–01 and stabilised around 1 per cent till 2005. The employment in MSMEs in Punjab declined by 1.33 per cent and 1.10 per cent during 2006–07 and 2008–09. The employment rose by an average of 3.48 per cent after 2009. The Compound Annual Growth Rate (CAGR) of all the variables i.e., number of units, employment, fixed capital and production of micro, small and medium enterprises in Punjab was computed with the help of the Log-Lin model.

**Table 2: Growth of SSI/MSMEs in Punjab from 1995-96 to 2020-21**

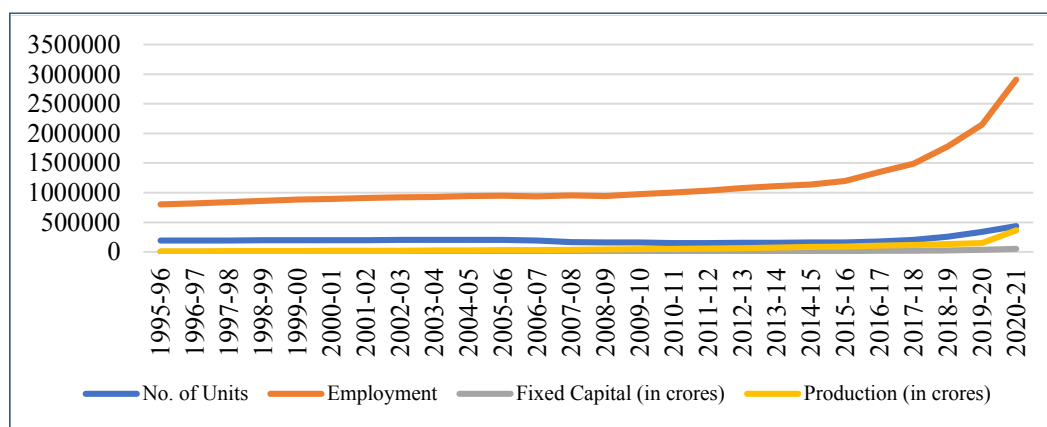
Year	No. of Units	Employment	Fixed Capital (in Crores)	Production (in Crores)
1995-96	191025	802329	2216.16	9713.94
1996-97	193332	821170	2491.33	11106.22
1997-98	195383	840568	2859.99	13057.74
1998-99	197344	864592	3360.67	14444.48
1999-00	199071	883005	3793.68	16610.85
2000-01	200603	897642	4109.14	18324.5
2001-02	201736	909266	4373.79	20338.55
2002-03	202537	920077	4641	22524
2003-04	203224	930036	4816	24984
2004-05	203984	943664	4973	28474
2005-06	204522	951318	5105.79	30873.57
2006-07	191639	938684	5502.94	33273.16
2007-08	167722	954769	5783.72	36437.88
2008-09	162559	944241	5972.26	41896.8
2009-10	160062	978932	6914.72	46357.44
2010-11	152583	1002860	8264.54	50,962.90
2011-12	151977	1033553	9814.88	56184.22
2012-13	154421	1077616	11459.15	62971.24
2013-14	156518	1112858	12960.99	74606.07
2014-15	158655	1139126	14191.41	84630.32
2015-16	163460	1199577	15953.51	92114.22
2016-17	179412	1347769	19633.31	107339.35
2017-18	206095	1487843	22726.02	118572.15
2018-19	259433	1779275	28450.52	134099.81
2019-20	337955	2146649	36821.29	150458.97
2020-21	437594	2907944	51416.38	365517.78
Mean	201263.31	1146744.73	11484.85	64072.08
S.D.	61748.20	473871.12	11874.28	73446.17
C.V.	0.31	0.41	1.03	1.15
CAGR	0.79%	3.45%	11.40%	12.48%
t-value	1.262	7.511	20.437	15.292
p-value	.219	.0001**	.0001**	.0001**

Source: Government of Punjab (Various Years), Statistical Abstract of Punjab, Economic and Statistical Organisation and Directorate of Industries and Commerce, Chandigarh.

The results of the regression indicate that the CAGR of the number of units and employment were 0.79% and 3.45% respectively during 1995-96 to 2020-21. The fixed capital and production rose by relatively higher growth rate of 11.40 per cent and 12.48 per cent during 1995-96 to 2020-21. The growth rate had remained positive throughout the period. The coefficient of variation of the parameters indicates greater fluctuations in the production followed by fixed investment and employment during 1995-96 to 2020-21. The *p*-values of the parameters i.e., employment, fixed investment and production are highly

significant. The *p*-values of these parameters are less than 0.05. This indicates that the growth in the employment, fixed investment and production over a period of 1996-2021 is highly significant. The *p*-value of the number of units parameter is 0.219 > 0.05 which implies insignificant growth in the number of units during 1995-96 to 2020-21 in Punjab.

Fig. 1 indicates the trend of growth of MSMEs in Punjab in terms of number of units, employment, fixed capital and production during 1995-96 to 2020-2021.



**Fig. 1: Growth of SSI/MSMEs in Punjab During 1995-96 to 2020-21**

### Registration of MSMEs in Punjab

The data on the opening up of new MSMEs are one of the most important metrics to measure how well the MSME sector has developed in a country's economy since it illustrates the conditions that make it possible for such businesses to start up and expand. The registration of small-scale enterprises was done with the District Industries Centres (DICs) prior to the enactment of MSMED Act 2006. Thereafter, the Entrepreneurs Memorandum (EM) was introduced for the purpose of registration of MSMEs. The enterprises were required to file Entrepreneurs Memorandum (Part-I) at DICs prior to starting an enterprise. The Entrepreneurs' Memorandum (Part-II) was to be filed by the concerned entrepreneurs after the commencement of production. The filing of the Entrepreneurs' Memorandum (Part-II) is completely discretionary for micro and small enterprises under MSMED Act 2006. The number of EM-II filed by micro and small enterprises in Punjab have been shown in the Table 3. MSMEs have recorded a positive growth of number of EM-II filings till 2011-12. The highest growth rate of 72.2 per cent was registered during 2009-10. The

growth rate turned negative i.e., -14.2 per cent in 2012-13 which further declined to around -13.7 per cent and -6.7 per cent during 2013-14 and 2014-15 respectively. Out of the total EM-II filings by MSMEs, more than 98 per cent were filed by MSEs during 2007-15. Further, out of the total filings by MSEs, majority were filed by micro enterprises.

**Table 3: Number of EM-II Filed by MSEs During 2007-08 to 2014-15 in Punjab**

Year	Micro	Small	MSEs	MSMEs	% Share of MSEs
2007-08	736	186	922	932	98.92
2008-09	977	285	1262	1272	99.21
2009-10	1748	426	2174	2189	99.31
2010-11	2228	744	2972	2988	99.46
2011-12	2394	665	3059	3087	99.09
2012-13	1974	650	2624	2644	99.24
2013-14	1676	588	2264	2282	99.21
2014-15	1481	631	2112	2137	98.83

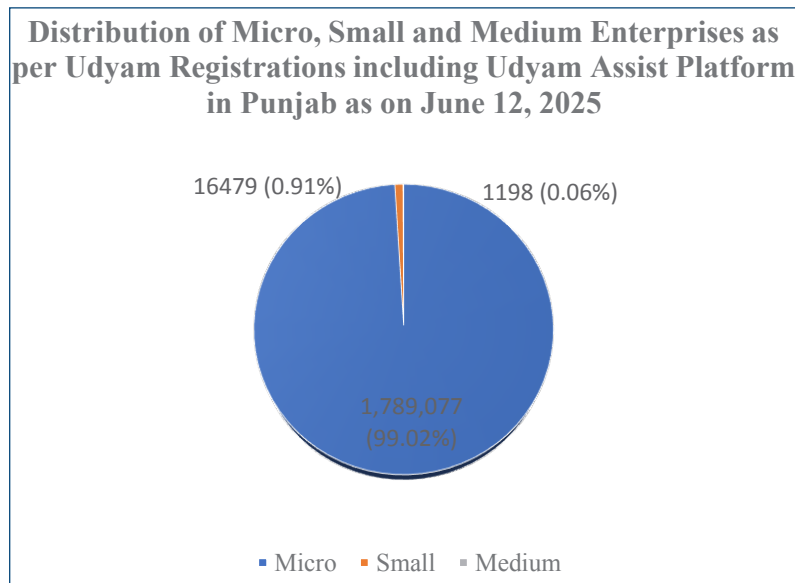
Source: The State/UT Commissionerates/Directorates of Industries & MSME-Development Institutes

The Udyog Aadhar Memorandum (UAM), an online registration system for self-certification of MSMEs was launched in September 2015 to promote ease of doing business in India. It was not mandatory for MSMEs to follow the UAM system. Further, a new process for registering MSMEs was launched by the Ministry of MSME on July 1, 2020. The entire registration process is now paperless, hassle-free, and cost-free. The interested applicant is given an Udyog Registration Number upon completion of the registration process. The benefits of the MSME schemes introduced by the government can be obtained using this number.

Informal Micro Enterprises under Udyam Assist Platform in Punjab as on 12 June, 2025.

Around 99.02 per cent of the Udyam Registrations are made by the micro enterprises in Punjab. The micro enterprises are relatively more active in Udyam Registrations as compared to small-scale and medium enterprises. Less than 1 per cent of the registrations were made by the small and medium enterprises. About 0.91 per cent of the total registrations were done by the small enterprises and 0.06 per cent of the total registrations were done by medium enterprises (MSME Dashboard, 2025).

Fig. 2 represents the distribution of micro, small and medium enterprises as per Udyam Registrations including



Source: MSME Dashboard (2025), Ministry of Micro, Small and Medium Enterprises.

**Fig. 2: Distribution of Micro, Small and Medium Enterprises as Per Udyam Registrations in Punjab as on June 12, 2025**

### Government Initiatives for the Growth of MSMEs in Punjab

There are a number of government initiatives that have been undertaken by the government to promote ease of doing business in the state. One of the major efforts has been the establishment of Micro, Small and Medium Enterprises-Development Institute (MSME-DI) in 1956 in Ludhiana, formerly known by the name of Small Industries Service Institute, to cater to the needs of small-scale enterprises. At present, the Institute

aims at providing technical, economic and managerial, export counselling, skill development and management development training, knowledge related to technological upgradation, energy conservation, pollution control and helps in overall development of new and existing MSMEs located in all the districts of Punjab and Chandigarh. The institute is one of the thirty-two institutes functioning across the country under the Ministry of Micro, Small and Medium Enterprises, Government of India. MSME-DIs implement various schemes of the Government of India to make the MSME sector internationally competitive.

The Punjab Bureau of Investment Promotion (Invest Punjab) was established by the Government of Punjab to facilitate investors in the state in 2013. It serves as a single point of contact for providing approvals and regulatory clearances to the investors. The state government has launched an online portal namely, Business First, to ease the regulatory environment. The Bureau provides consultancy and advisory services to the investors through experts. The state of Punjab has recognised different needs pertaining to different stages of MSMEs. The stages of MSME growth are envisioning business, commencement of business, growth of business, revitalising a business and business exist. The approach of the state to the development of MSME sector is to address the needs that arise during these five stages. The approach to the development is aligned to growth and performance of MSMEs.

The state has proposed to launch 'MSME Punjab' under the aegis of Punjab Industrial and Business Development Authority for making the MSME sector more dynamic and competitive. This initiative will help the MSMEs in modernisation and technological development, easy access to credit, marketing support, quality certification, skill upgradation, etc. The structure of MSME Punjab will include specialised divisions with professional experts for delivering their services to investors and entrepreneurs. The Government of Punjab has collaborated with the Global Alliance for Mass Entrepreneurship (GAME) to improve the ease of doing business for the MSMEs in Punjab. The GAME along with Haqdarshak Empowerment Solutions Private Ltd. has conducted a registration drive in the districts of Mohali, Patiala, Ludhiana and Bathinda in 2020. This drive helped to mobilise 365 MSME units to apply for the Udyam Registration.

The Department of Industries and Commerce, Government of Punjab along with GAME and Nemo has conducted a drive for MSMEs to help the fresh MSME units to benefit from Punjab Right to Business Act (RBA), 2020. Under this act, the entrepreneurs who are planning to establish new business units in Punjab can get the 'Certificate of In-Principle Approval' for all the

services such as factory building plan, change of land use, trade license registration, fire department no objection certificate, registration of establishments, completion certificate in one go. This certificate is issued within 3–15 days from the District Deputy Commissioner and the validity of the certificate is for three years and six months. The entrepreneurs can apply to obtain the regular approvals anytime but not later than three years from the date of issue of the certificate (GOP, 2020).

## **Growth and Contribution of MSMEs in Ludhiana District**

Ludhiana district leads Punjab in the industrial sector. It has the largest share of around 30.74 per cent in the total output produced by MSMEs in Punjab (GOP, 2023). There are 37,089 number of units of MSMEs in Ludhiana district absorbing 2,47,135 workers. The value of production by MSMEs in the district is ₹63,402.72 crores (GOP, 2023). The city is known as "Small Scale Industrial Capital of India" due to its remarkable position in manufacturing sector (GOI, 2011). Ludhiana has outperformed other industrial towns in terms of production and exports, whether it is for bicycles or its parts and components, knitting yarn, woollen clothing, hosiery and knitwear, machine tools, sewing machines and parts, or other industrial goods.

This section focuses on analysing the secondary data relating to growth in number of units, their contribution to employment, fixed investment and production of MSME sector in Ludhiana district. Table 4 indicates the growth of MSMEs in Ludhiana from 1995-96 to 2020-21. The Compound Annual Growth Rate (CAGR) of all the variables i.e., number of units, employment, fixed investment and production of micro, small and medium enterprises were computed with the help of Log-Lin model. The results of the regression indicate that the number of units of MSMEs had increased from 40,191 in 1995-96 to 1,19,754 in 2020-21, registering CAGR of around 2.428 per cent. The employment levels during the same period rose from 2,44,705 in 1995-96 to 10,39,506 in 2020-21, recording a CAGR of 4.817 per cent.

**Table 4: Growth of SSI/MSMEs in Ludhiana from 1995-96 to 2020-21**

Year	Number of Units	Employment	Fixed Investment (in Crore)	Production(in Crore)
1995-96	40191	244705---	587.87	3087.90
1996-97	40860	250013	656.16	3499.29
1997-98	41365	255074	729.94	4223.12
1998-99	41852	262050	868.28	4712.58
1999-00	42232	265871	956.64	5560.94
2000-01	42411	268148	1008.14	6121.76
2001-02	42570	270234	1055.25	7060.01
2002-03	42704	273593	1121.12	8225.71
2003-04	42923	277702	1185.77	9716.39
2004-05	43125	285504	1225.69	11502.99
2005-06	43321	288504	1265.18	12863.24
2006-07	42210	291903	1327.95	14808.47
2007-08	38504	303773	1399.89	17163.46
2008-09	38393	308713	1442.52	21650.68
2009-10	39091	335741	1730.96	24428.41
2010-11	40249	376490	2730.61	27495.4
2011-12	41385	401827	3787.79	31020.04
2012-13	42418	425721	4709.69	35137.29
2013-14	43372	446191	5568.08	39248.07
2014-15	44082	455816	6078.63	44917.92
2015-16	46144	478986	6798.74	50599.4
2016-17	51607	529778	7977.79	60853.66
2017-18	59432	580118	8871.62	66606.59
2018-19	75092	658582	10491.3	72916.67
2019-20	94938	769220	12823.78	81255.33
2020-21	119754	1039506	19003.81	171047.15
Mean	49239.42	397837.04	4053.97	32143.17
S.D.	19023.54	190028.33	4598.03	36738.93
C.V.	38.63%	47.77%	113.42%	114.30%
CAGR	2.428%	4.817%	14.084%	15.459%
t-value	4.218	12.095	19.070	52.234
p-value	.0001**	.0001**	.0001**	.0001**

Source: District Industries Centre, Ludhiana.

The fixed investment and production grew at relatively higher rates, of 14.084 per cent and 15.459 per cent, respectively during 1996-2021. The growth rate had remained positive throughout the period. The coefficient of variation of the parameters indicates greater fluctuations in the production followed by fixed investment and employment during 1995-96 to 2020-

21. The  $p$  values of the parameters i.e., number of units, employment, fixed investment and production are highly significant. The  $p$  values of these parameters are less than .05. This indicates that the growth in the number of units, employment, fixed investment and production over a period of 1995-96 to 2020-21 remained highly significant in the district.

As on 24 June, 2025, there were a total of 86592 Udyam registrations by manufacturing MSMEs. Out of these registrations, around 95.7% registrations were made by micro enterprises. About 3.89% registrations were made by small-scale enterprises and less than 0.5 per cent registrations were made by medium enterprises. In contrast, there were total 160990 Udyam registrations by MSMEs rendering services. Out of these registrations, around 98.46% registrations were made by micro enterprises. Less than 2% registrations were made by small and medium enterprises (GOI 2025).

## Major Challenges Faced by MSMEs in Punjab

### Shortage of Labour

The MSMEs frequently struggle with a shortage of labour, which has a detrimental effect on the production and there is a risk of loss of potential clients due to the inability of meeting the sale targets on time. This further leads to delays in payments, and payment cycles become disrupted. The Ludhiana bicycle industry faces similar issues since factories that make bicycles and parts have drastically cut production by 60% due to a shortage of labour (Behl, 2023). Recognising that the labour shortage problem will only worsen in the future, the industries have started putting practical plans into place to lower the labour intensity of their operations. The industries might adopt advance automation assistance in the industries on large scale in place of labour to cope up with the shortage.

### Shortage of Power

MSMEs in Punjab are affected by prolonged and frequent power cuts, which create a vicious cycle that affects production, delays deliveries, lowers revenues, results in job losses, and ultimately hinders economic growth. Given the high operating expenses of the micro enterprises, they lack power backups, forcing them to halt operations during power cuts.

Frequent power breakdowns have led to disruptions in business operations of various manufacturing units particularly in key industrial hubs such as the focal points in Ludhiana (TOI, 2025). The outdated electricity distribution infrastructure, particularly

the outdated cables and conductors, is another issue that contributes to power tripping. Despite the state government's efforts to promote Invest Punjab and ease of doing business, it is imperative that the basic necessities of industry, such as water and power supply, are met.

### Lack of Access to Credit

It is challenging especially for the Micro and Small Enterprises (MSEs) to procure capital for their operational and expansion needs. These enterprises face numerous obstacles in availing credit from banks and financial institutions. The procedure for availing loans from formal sources of credit is not a simple process. Due to many formalities and paperwork requirements, banks have a drawn-out and complicated procedure. The sanctioning loan process is time-consuming and is also accompanied by delays in releasing the money. It is difficult for MSEs to provide collateral security for obtaining finance from banks and financial institutions. Though there are several financial schemes launched by the government to provide cheap credit to MSMEs, the banks and financial institutions always prefer to provide loans to the medium enterprises owing to relatively lesser risk involved with them. Due to issues such as lack of collateral, extensive documentation, and limited trust in their ability to repay loans, MSEs find it difficult to get financial help. Despite the government's deliberate efforts to offer easy access to credit to MSEs, these barriers still exist.

### Marketing Challenges

A lack of resources including time, finance, and skilled manpower, makes it difficult for the MSMEs to increase the marketability of their products. The larger companies have driven MSMEs out of their markets owing to several factors, including the growth of e-commerce and the onset of globalisation. There is the problem of lack of demand for the products of MSMEs owing to competition in the market. These enterprises face the problem of higher prices of raw material arising due to high transportation costs. They are also plagued by the issue of ineffective logistics and lack of ability to establish distribution channels in overseas markets. MSMEs have weak sales promotion abilities and little ability to promote their products in global markets. Since they lack

the knowledge to penetrate overseas markets, these units find it challenging to internationalise their goods. There is a dearth of marketing research by the MSMEs owing to limited resources.

### **Technological Challenges**

MSMEs find it difficult to optimise their manufacturing processes, adapt to changing market trends and achieve cost efficiencies. The lack of need-based research, a shortage of qualified and skilled manpower, and ignorance of information and communication technologies (ICTs) are some of the factors accounting for low competitiveness of MSMEs in the manufacturing sector. This makes it difficult for them to compete against relatively larger enterprises that have access to cutting-edge machinery and technology. The human resources are not adequately trained for improving their operational understanding of manufacturing, production, finance, accounting, marketing, and other areas. The owners of MSMEs are themselves unaware of cutting-edge industrial technologies. Their methods of production are obsolete and outdated. Furthermore, these enterprises are not able to hire competent IT professionals due to their high cost.

### **Conclusion**

The agricultural strength of Punjab, along with its developed infrastructure, improved transportation and communication facilities and also the enterprising spirit of the people of Punjab provides pre-requisite conditions for take-off in the industrial sector. The state needs to fully utilise its potential for growth in the industrial sector through the development of MSME sector especially in agro-based and other key industries.

Despite several governmental measures aimed at promoting of MSMEs in Punjab, the micro, small and medium enterprises face a number of obstacles and hindrances. MSMEs are facing issues because of their reliance on outdated technologies and growing competition in the domestic and global market. The potential for low-cost innovative solutions to improve the quality of manufacturing process and competitiveness should be thoroughly researched and adopted by the firms. Due to the small size of these units, efforts should be made

to ensure that all units have access to the most recent technologies. The need for technology upgradation and the withdrawal of maintenance support for existing technology could motivate MSMEs to adopt new technology. By encouraging a culture of research and development, several issues linked to marketing goods in foreign markets can be resolved. Assistance should be provided to MSMEs in obtaining overseas quality certifications and raising the calibre of their output. Moreover, support services such as technical help, consultations should be provided to the enterprises to improve their competitiveness in both local and global markets.

There exists a significant problem of educated unemployment in Punjab. The enterprises could therefore assist to create more jobs for the technically skilled labour force. There exists the problem of skilled labour in the state. Business consultancies can play a vital role in assessing skill gaps and developing specialised training programmes in partnership with the industrial experts to equip MSMEs with a highly qualified staff that is capable of meeting the market demands. Business consultancies might help in providing insightful advice, link MSMEs with financial institutions, counsel on technology adoption, ease the hiring process, and ensure legal compliance. Awareness should also be created for the schemes and the programmes undertaken by the government for the skill enhancement of the entrepreneurs and workers for the MSME sector.

Furthermore, Punjab can no longer afford to ignore the alarming downturn in the industrial sector brought on by the region's distance from seaports and its poor connectivity. There is a need to improve the competitive environment in the state to increase its exports from MSMEs. To address the problem of interrupted power supply in some of the industrial regions of the district, innovative practices should be adopted keeping in view the solar and renewable energy sources. It is crucial to improve the accessibility of regular electricity, adequate water supplies, and high speed internet services to ensure smooth functioning of the enterprises.

Lack of access to credit is another issue faced by MSMEs in Punjab. The banks and financial institutions largely divert their loans to medium-sized enterprises to meet their targets and avoiding risks involved in lending to micro and small enterprises. The funding should be provided in major proportion to the micro enterprises.

Taking cognisance of the situation in Punjab, it is suggested that the state of Punjab requires economic transformation with more focus on inclusive and sustainable growth. The industrial diversification is a pre-requisite for achieving self-sustained growth in the long run. The state should invest in infrastructure, technological upgradation, and research and developmental activities.

## References

- Behl, M. (2023, June 2). Production falls 60%, cycle industry hits rough patch. *Times of India (Online)*. Retrieved from <https://timesofindia.indiatimes.com/city/ludhiana/production-falls-60-cycle-industry-hits-rough-patch/articleshow/100692089.cms>
- Bhalla, G. S., & Chadha, G. K. (1983). *The green revolution and the small peasantry: A study of income distribution among Punjab cultivators*. New Delhi: Concept Publishers.
- Dhaliwal, M. K. (2024). Promoting entrepreneurial spirit: Support systems for women entrepreneurs in Punjab's MSME sector. *Journal of Entrepreneurship and Management*, 13(2), 14.
- Economic and Statistical Organisation. (2015). *Statistical abstract of Punjab*. Chandigarh. Government of Punjab.
- Frequent Power Breakdowns Ailing Industry. (2025, June 7). *Times of India*. Retrieved from <https://timesofindia.indiatimes.com/city/ludhiana/frequent-power-breakdowns-ailing-industry/articleshow/121698600.cms>
- Government of India. (2025). Ministry of micro, small and medium enterprises.
- Government of India. (2025). *MSME dashboard*. Ministry of Micro, Small & Medium Enterprises.
- Government of Punjab. (2019). *MSME micro, small & medium enterprises, invest Punjab*. Punjab Bureau of Investment Promotion.
- Government of Punjab (Various Years). *Annual report*. Ludhiana. District Industries Centre. Department of Industries and Commerce.
- Gujarati, D. (2011). *Econometrics by example*. New York: Palgrave Macmillan.
- India Brand Equity Foundation. (2024). *Punjab state presentation report*. Department of Commerce, Ministry of Commerce and Industry, Government of India.
- India Brand Equity Foundation. (October 2024). *Punjab state report*. New Delhi.
- Jain, V., & Kiran, R. (2012). Technology management strategies and small and medium enterprises of Punjab manufacturing. *Journal of Intellectual Property Rights*, 17(1), 64–72.
- Lewis, W. A. (1954). Economic development with unlimited supplies of labour. *The Manchester School of Economic and Social Studies*, 22(2), 139–191.
- Pathak, H. N. (1970). Small-scale industries in Ludhiana. *Economic and Political Weekly*, 5(28), 1091–1097.
- Punjab Bureau of Investment Promotion. (2022). *Punjab for cycle industry*. Government of Punjab.
- Sahoo, P., & Ashwani (2020). COVID-19 and Indian economy: Impact on growth, manufacturing, trade and MSME sector. *Global Business Review*, 21(5), 1159–1183. Retrieved from <https://doi.org/10.1177/0972150920945687>
- Singh, L. (2006). Deceleration of Industrial Growth and Rural Industrialization Strategy for Indian Punjab. (Working Paper No.799). Munich Personal RePEc Archive.
- Singh, L., & Singh, S. (2002). Deceleration of economic growth in Punjab: Evidence, explanation, and a way-out. *Economic and Political Weekly*, 37(6), 579–586.
- Tewari, M. (1999). Successful adjustment in Indian industry: The case of Ludhiana's Woolen knitwear cluster. *World Development*, 27(9), 1651–1671.
- The Institute of Chartered Accountants of India. (2022). *Compendium of MSME Policy and Incentive Schemes of Punjab*. The Committee for MSME & Start-up. ICAI.