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PERFORMANCE EVALUATION OF LEATHER INDUSTRY IN TAMIL NADU

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Abstract

All over the world, leather and leather products are widely used by the manufacturer of footwear. Until the end of the 1960s, the major meat-producing countries also had facilities for running and finishing hides and skins and converting these into a variety of leather products for use either within the country or for export among developed countries. The leather industry growth has been sustained by the country's large livestock population, which claims a unique position globally; all these items consume about 60 percent of the total leather production. This paper consists of the growth and export performance of the Tamilnadu leather industry faced by social and economic problems in particular leather products. This study mainly depends upon secondary data. The primary data are also taken into account to analyse certain issues and comprehend the problems faced by Leather industires in Tamil Nadu. The data are collected from records available in Department of Industries and Commerce, Annual report of Micro, small and medium Enterprises 2018-19 and 2019-20 issued by Micro, small and medium Enterprises Department, Journal, Magazines, News paper etc. The data collected have been analysed by employing various statistical tools like semi-log- Growth Model, Quadratic equation, Trend projection Method (Normal equation and straight line equation), Cobb-Douglas Production Function in order to arrive at the result. The increase in labour productivity played a major role in the growth of total factor productivity. Even though the leather industry was in a strong position during the study period, a significant amount of capital was not effectively utilised, especially after liberalisation. After liberalisation, the leather industry was credited with efficient use of labour and capital. The trend of declining productivity was brought on by a sharp decline in the leather industry's gross value added, especially after 1995–1996. It is necessary to effectively utilise resources in order to raise the gross value added in order to develop the Tamilnadu leather industry. In order to boost the gross value added to the leather industry in Tamilnadu, it is also necessary to strengthen research and development.

Keywords: Leather Industry, Exports, Leather Products.

Introduction

The development of national economies depends heavily on small-scale industries. Many more nations have correctly viewed these industries as the main drivers of growth. They open the door for a balanced industrial development in the region. The main goal of India's five-year plan is to increase employment opportunities because there is a persistent problem with unemployment in the Indian economy. According to the viewpoint of policymakers in developing countries, one of the practical ways to resolve or mitigate this issue is through industrial development. According to Bryce, it is a project in which the less developed nations invest a lot of hope in order to solve their issues with poverty, insecurity, and overpopulation, as well as put an end to their recently realised economic backwardness in the modern world. The importance of industrial development was also emphasised by the United Nations

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Committee for Industrial Development in 1963. It recognised industrialization as a process of economic growth in which an increasing portion of the nation's resources are mobilised to create a technically advanced, diversified domestic structure distinguished by a dynamic manufacturing sector with the ability to guarantee a high rate of growth for the economy as a whole and to achieve both economic and social progress. With the winds of change, products like handbags and travel bags entered the market. Up until the end of the 1960s, the major meat-producing nations also had facilities for processing hides and skins into a variety of leather goods that could be used domestically or exported to other developed nations. To meet their rising demand, they even imported hides from developing nations. Japan, Taiwan, South Korea, Hong Kong, and Singapore are the five tigers of the leather industry in Asia. On the other hand, Brazil, Argentina, Spain, Greece, and Portugal have successfully tapped into opportunities on the international market. Along with nations like India, Bangladesh, Thailand, Indonesia, Pakistan, and Turkey have also begun exporting semi-tanned and finished leather and have taken active steps to modernise and expand their tanning industries. A sizable portion of the global footwear, apparel, and leather markets in developed nations has been successfully penetrated over the past 20 years by newly industrialised nations like South Korea, Taiwan, Brazil, Spain, and Portugal. However, nations with poor product quality and marketing infrastructure, like India, struggle to compete, especially in the market for finished goods. In a recent ILO report, it was stated that "the leather and footwear industry is showing a trend of globalisation and increased competition, particularly in the labor-intensive fabrication sectors of the Third World." "Europe, with Italy in first place, invariably remains the centre of technological design innovations."With the majority of leather produced today going towards the production of footwear and increasingly towards upholstery and leather clothing, leather continues to enjoy a high level of consumer interest.

Indian Leather Industry

An important sector of the Indian economy is the leather, leather products, and footwear industries. This industry is among the top ten foreign exchange earners for the nation and is renowned for its consistency in producing high export earnings. India exported footwear, leather, and leather-related goods worth $3.68 billion in the years 2020–21. Since India is home to 11% of the world's goat and sheep population, as well as 20% of the world's cattle and buffalo, the industry is blessed with an abundance of raw materials. Strengths like a skilled workforce, cutting-edge technology, increased industry adherence to global environmental standards, and the steadfast support of related industries are added to this. A sector with a high employment rate, the leather industry employs 4.42 million people, the majority of whom come from the socially disadvantaged groups. In the leather products sector, women make up about 30% of the workforce. India is the world's third-largest exporter of saddlery and harness, the fourth-largest exporter of leather goods, and the second-largest exporter of leather apparel. The major production hubs for footwear, leather, and leather goods in India are found in the States of Tamil Nadu, which includes Chennai, Ambur, Ranipet, Vaniyambadi, Vellore, Pernambut, Trichy, Dindigul, and Erode; West Bengal, which includes Kolkata; Uttar Pradesh, which includes Kanpur, Agra, and Saharanpur; Maharashtra, which includes Mumbai; Punjab, which includes Jalandhar; and Karnataka, which includes Bengalure.

Growth of Leather Industry

The country's large livestock population, which holds a unique position in the world and is "estimated at 425 million cattle, buffaloes, sheep, and goat," has supported the growth of the leather industry. (The world's population is made up of 57 percent buffaloes, 16 percent

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cattle, 20 percent goats, and 4 percent sheep). However, because livestock is only growing at a rate of 1.2 percent annually, the supply of inventive hides and skins has essentially remained constant. Over Rs. 3.3 crores worth of ovine skins are lost each year due to carcasses not being flayed, claims CLRT (Chennai). Therefore, one of the main obstacles to the expansion of the leather industry in the future will be the availability of raw materials. "Kanpur is one of India's major centres for the production of leather and leather goods, with a focus on harness (safflery) and shoe leathers as well as tanning and finishing buffaloes. Processing cowhides and goatskins for tanning and finishing is a major industry in Calcutta. Finishing leathers of various types are a speciality of Chennai and several districts in Tamil Nadu.

Table 1
India's export of Leather & Leather products

Category	2019-2020	2020-2021	% Variation	% Share (2021)
Finished leather	524.15	378.23	-27.84%	10.27%
Leather footwear	2081.67	1485.55	-28.64%	40.35%
Footwear components	261.67	197.59	-24.49%	5.37%
Leather garments	429.11	295.56	-31.12%	8.03%
Leather goods	1353.74	944.31	-30.24%	25.65%
Saddlery and harness	151.44	186.18	22.94%	5.06%
Non-leather footwear	281.97	194.16	-31.14%	5.27%
Total	5083.76	3681.58	-27.58%	100.00%

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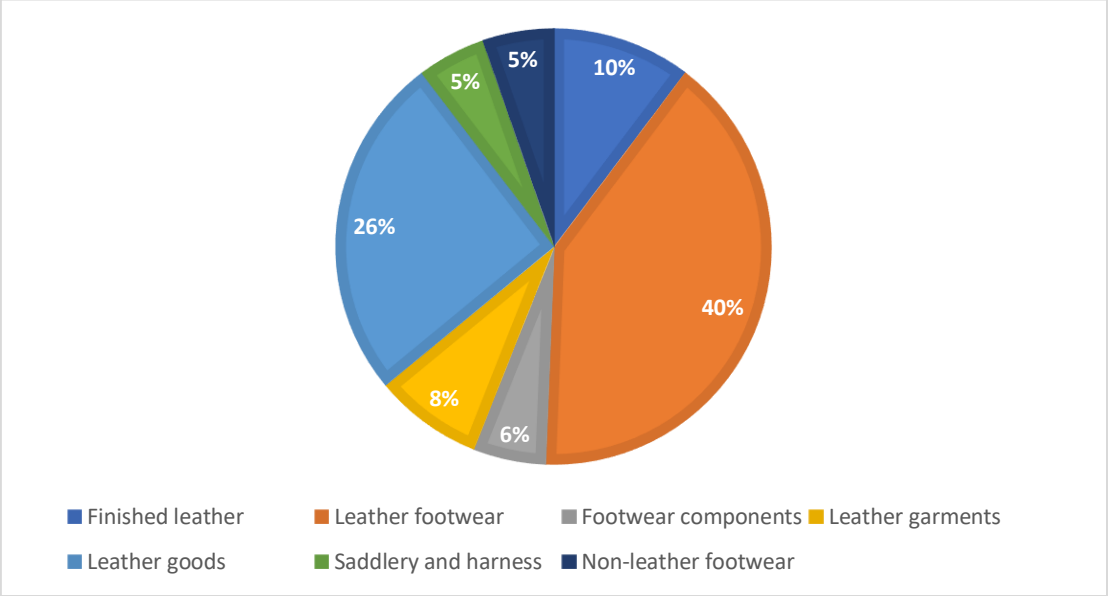
Figure 1
India's export of Leather & Leather products



Recent trends in the leather industry in Tamil Nadu

The following are the recent changes that have taken place in the leather industry in India:

- Due to the switch from traditional production methods to factory-based production, there is very little production, and the cottage sector is rapidly declining.
- 90% of skins and 50% of hides are sourced from animal slaughter, improving the quality of finished leather.
- Due to the liberalisation of the import policy, the leather product industry has commendable access to cutting-edge technology.
- The proportion of women working in the leather and footwear industry has been rising.
- The international market now has a better perception of Indian leather goods.
- To meet the demands of export, a market expansion for technical human resources and skilled labour is perceived.
- Imported hides and skins are becoming more and more necessary.
- The treatment of effluents has come into greater focus.

Review of Literature

In his study titled "Institutional Finance for the Development of the SSI in Karnataka," Rudra Murthy (2001) claimed that the demand from the SSIs sector has not been met by the availability of institutional finance. The owner's educational background had little effect on how the business was run. Limited companies were found to be less timely and irregular with loan repayment than proprietorship and partnership firms. The study makes recommendations for the creation of an SSI mutual fund, the opening of more specialised SSIs branches, and the adaptation of the Narasimham Committee report for the SSIs industry. In his study titled "Small-Scale Industries and World Trade Organisation," Thillainayagam (2002) noted that large corporations could not effectively combine production and marketing but could instead focus on global product marketing. Ancillarization allows large corporations to develop horizontal networking. Small units might be delivered as a subcontract. Small and medium-sized businesses could focus on production rather than product marketing. When possible, large

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multinational corporations could serve as assembling units, while small and medium-sized businesses could create intermediary goods or support services for the main assembling units. There might be a technological connection between the main units and the supporting units. With this joint venture production, the equity issue with small-scale units would be resolved. Rolland Le Brasseur, et al. (2003) investigated a model of growth momentum as measured by sales using an empirical study of 145 new venture start-ups. The relationship between pre-startup activities, intended and actual business expansion activities, and early stage performance are the main areas of interest. The results showed a positive correlation between (i) the range of pre-startup activities and (ii) the range of expansion activities and the sales level attained in the second years. Business performance was negatively correlated with the owner-manager's relative reliance on technical expertise at the time. The study also showed a persistent discrepancy between owner-managers' intentions for expansion and actual expansion. The core principles of the tactics for the survival and expansion of new ventures were outlined by Vijay Vayas in 2005. According to him, an organization's capacity for innovation directly affects its productivity, profitability, and growth. But as technological change has accelerated, small businesses have found it harder and harder to innovate. Despite the high-profile success of a few start-ups, innovation conflicts with established businesses (sic) are resulting in a significant number of everyday business owners losing this battle of the underdogs. A strategy of imitation facilitated entry and subsequent consideration through incremental innovation should be directed at the lower part of the value chain because the very spirit of entrepreneurship is embodied in over sprouting small enterprises. Small-scale industries (SSIs) in India produce the second-highest number of employment opportunities for the country's population, after agriculture, according to Muraliselvam's article from 2007. He also noted that SSIs face a number of challenges, including financial difficulties, a lack of sufficient raw materials, a lack of reliable power sources, problems with marketing and technical know-how, poor transportation infrastructure, and fierce competition. According to Karthihaselvi, Neelamegam, and Magesan (2010), small-scale industries are the realisation of Mahatma Gandhi's dreams. He encouraged the development of small-scale industries in India because he believed it would help the country's underprivileged citizens rise up. Small- and micro-scale businesses rely on talent and effort rather than capital. So, even someone from the middle class could own and run this. The new international poverty line is $1.25, and 40% of Indians are thought to be living below it. Since it is difficult to find jobs for everyone, at least we can promote self-employment through small-scale industries. The nation is fortunately endowed with sufficient natural resources. Therefore, now is a good time for small-scale industry growth because the government can offer loan facilities and suitable training for these sectors. This might inspire jobless people to start their careers in this field. The government's plans and assistance can make Mahatma Gandhi's vision a reality. The extensive effects of these environmental regulations on the Indian leather industry's export sector are examined in Roy, C.'s (2012) paper. This paper attempts to debate whether the increase in leather exports indicates a trade-off between environmental quality and export volume. Within the constraints of the data that is currently available for environmental statistics, this paper has established a positive correlation between environmental quality and the volume of leather exports and has justified that, rather than supporting Porter's Hypothesis, the Indian Leather Industry does so.
Recent research has been conducted at the Kolkata Leather Complex, the largest concentration of organised leather units in Kolkata, which is a 1100 acres land-based leather industry complex in Bantala on the eastern edge of the city. The paper attempts to measure the magnitude of different job security perceptions across the categories of workers and also attempted to recommend necessary initiatives to address the plight of the workers based on structured

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questionnaire based interviews conducted on a randomly chosen sample of 400 workers. The present study's hypotheses were tested using common statistical tools like correlation, regression, paired t-tests, and chi-square tests. The purpose of the Gupta, S. K., & Racherla, U. S. (2018) paper is to examine the interdependence between economic, social, and environmental performance and sustainability, with a particular emphasis on the leading states of the Indian leather industry. A significant bi-directional negative relationship between social performance and economic performance is supported by the structural equation analysis of unit-wise leather industry data for all the selected states. Contrarily, the relationship between economic performance and environmental performance has demonstrated a bidirectional positive relationship, as expected and supported by many existing theories. The correlation between social and environmental performance, however, has revealed some enigmatic and contradictory trends. Significantly negative coefficients have been shown by TN, which may be related to increased environmental compliance pressure that may have caused a trade-off between the two in order to increase cost competitiveness. The Thangamayan et al. (2019) paper examines the development and export performance of Tamilnadu's leather industry, which is struggling with social and economic issues related to leather products in particular. The production of footwear utilises leather and leather products extensively all over the world. Up until the end of the 1960s, the major meat-producing nations also had facilities for processing hides and skins into a variety of leather goods that could be used domestically or exported to other developed nations. The country's substantial livestock population, which holds a unique position globally and supports the leather industry growth, accounts for about 60% of the total leather production. The production and export of leather goods, which add value four to five times greater than that of the raw materials, are systematically promoted. The introduction of the ISI norms and a 5 percent export duty restriction on finished leathers. The main highlights of the new policy have been the liberal imports of raw materials, leather machines, chemicals, and auxiliary items. The leather industry is one of the main sectors with a significant environmental impact, both in terms of the consumption of raw materials and the disposal of waste. Large amounts of water energy are required for the transformation of leather's raw materials.

Statement of the Problem

The small-scale sector is viewed as a crucial tool for achieving the development economy's goals of growth and equity. As the small-scale sector is labor-intensive, it is the only source of income for even unskilled and semi-skilled labourers. It differs from large industries, which depend heavily on a specific geographic location and set of environmental conditions to produce goods. Smaller businesses have a propensity to be geographically more dispersed than larger ones, and they support more balanced development. It aids the entrepreneur in job creation at a relatively lower level of investment. Due to intense population pressure, a lack of capital, and global competition among large industries, the small scale sector may be a viable way to boost output and employment in the economy in the years to come. It has been expanding quickly and is capable of handling the fundamental issues facing the Indian economy, particularly regional imbalance and unemployment. The economy of Tamil Nadu has benefited greatly from the small-scale sector. In response, the Tamil government is paying much more attention to the small business sector. In terms of the size of small-scale industries, the State clearly comes in second. Despite all these advantages, this industry suffers from industrial sickness. Therefore, it is crucial to calculate the rate of expansion of this sector's employment, production, and investment. The variable must be located and evaluated in order to capture the trend. The impact and growth pattern of the variables in this context must be

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properly analysed. When compared to other nations in the world, India has a large leather and leather products industry because of factors like inexpensive labour, close proximity, and simple access to raw materials. Additionally, India exports a lot of leather and leather goods. As a result, the current study makes an effort to analyse the leather industry in India by looking at a few indicators of an industry's growth, including the number of factories, employees, gross fixed capital, gross value added, gross output, total remuneration, and profit. In the current study, the productivity of the leather industry has also been calculated. Thus, with this in mind as the main argument, the current study, titled "Performance evaluation of Leather industry in Tamil Nadu," was conducted.

Methodology

This study mainly depends upon secondary data. The primary data are also taken into account to analyse certain issues and comprehend the problems faced by Leather industires in Tamil Nadu. The data are collected from records available in Department of Industries and Commerce, Annual report of Micro, small and medium Enterprises 2018-19 and 2019-20 issued by Micro, small and medium Enterprises Department, Journal, Magazines, News paper etc. The data collected have been analysed by employing various statistical tools like semi-log-Growth Model, Quadratic equation, Trend projection Method (Normal equation and straight line equation), Cobb-Douglas Production Function etc in order to arrive at the result.

Semi log Model- Growth Model is

$$\text{Ln } Y_t = \alpha+\beta \text{ (time)} + U_t$$

Quadratic Function is

$$Y = \beta_0+\beta_1 \text{ (time)} +\beta_2 \text{ (time)}^2+ e_t$$

Normal equation and straight line equations are

$$\sum Y= na+ b\sum X$$

$$\sum XY= a\sum X + b\sum X^2$$

$$Y = a +bX$$

Cobb-Douglas Production Function is

$$Y= \beta_0.K^{\beta 1}+L^{\beta 2}$$

The above formula of Cobb-Douglas Production Function can be rewritten as

$$\text{Ln } Y= \ln\beta_0+\beta_1 \ln K +\beta_2 \ln L.$$

Data Analysis

The demand for its products was initially both domestic and international, making the leather and leather products industry one of India's oldest manufacturing sectors that began serving the global market in the middle of the nineteenth century. The industry exports roughly 46% of its output, ranks eighth among India's top export-earning industries, and contributes about Rs. 10,000 crores, or 4%, of the country's total export revenue each year. The industry represents 2.5% of the $387,200 billion global leather-related trade. According to estimates, 10% of the world's supply and 15% of all footwear, apparel, leather goods, and accessory purchases by top global brands are outsourced from India. A total of 2.5 million people are employed in the leather industry, which has an annual revenue of Rs. 25,000 crores. The quadratic function is used to analyse the growth of leather industry units in Tamil Nadu's Small Scale Industries/Micro, Small and Medium Enterprises for the 2019–2020 period. The outcome is shown below.

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Table 2
Profits of leather industry in tamilnadu

Year	Profits	Percentage change over the previous year
1992-1993	405	-
1993-1994	2213	446.42
1994-1995	1649	-25.48
1995-1996	1210	-26.63
1996-1997	843	-30.33
1997-1998	2075	146.15
1998-1999	3296	58.84
1999-2000	3780	14.69
2000-2001	7055	86.64
2001-2002	11976	69.75
2002-2003	11455	-4.35
2003-2004	37966	231.44
2004-2005	10239	-73.03
2005-2006	13037	27.33
2006-2007	13211	1.34
2007-2008	4850	-63.29
2008-2009	-5421	11.77
2009-2010	27327	604.09
2010-2011	2895	-89.4
2011-2012	9322	222
2012-2013	8766	-5.96
2013-2014	9745	11.16
2014-2015	7306	-25.02
2015-2016	11224	53.62
2016-2017	12024	7.12
2017-2018	13122	10.91
2018-2019	14588	11.11
2019-2020	15482	10.61
Mean	9047.423	
S.D	8645.45	

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Table 2
Descriptive statistics

	B	t	sig	F	R Square
Case Sequence	-253.316	-6.875	.000	36.629	.913
Case Sequence ** 2	25.602	7.843	.000		
(Constant)	807.050	9.148	.000		

$LEA\_units = 807.050-253.316\ (time) + 25.602\ (time)^2+U_t$

Leather units in Small Scale Industries / /Micro, Small and Medium Enterprises in Tamil Nadu took a negative trend with average growth rate of -253.316. As β^2 was statistically significant (0.000) the effect of time on rate of change over time was strong. Then it took a positive slope moving upward. Capital invested in Leather industry started with Rs.745 lakhs in 2002. The table reveals that the sudden fall and raise in the investment through out the study period. It touched the culmination level of Rs.11285 lakhs in the year 2019. Then the next year ie, 2020, it plunged in to Rs.5685 lakhs. Once again a little improvement appeared in the investment of capital in the year 2020 with Rs.8881 lakhs.

Figure 2
Number of units in Leather Industry

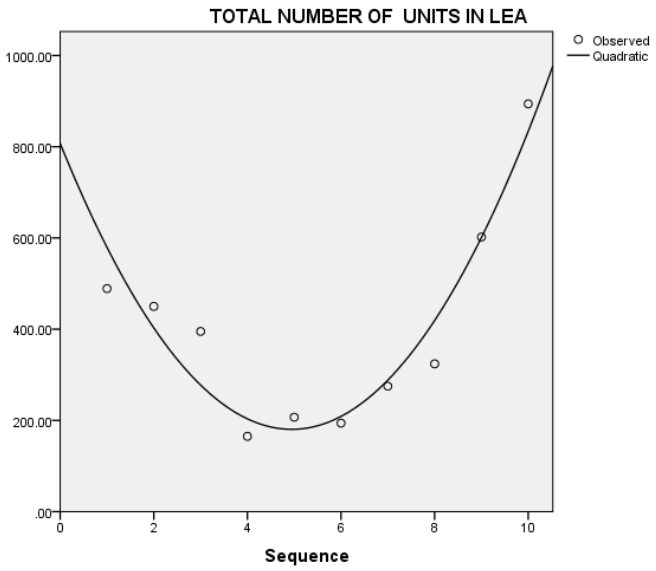

Table 3
The growth of capital can be understood by employing Semi-log growth model

	B	Std. Error	T	sig	F	R Square
Case Sequence	.325	.064	5.110	.001	26.111	.765
(Constant)	6.231	.394	15.797	.000		

$Ln\ (LEA\_capital) = 6.231 + 0.325t+U_t$
$t(5.110)$
$sig(0.001)$

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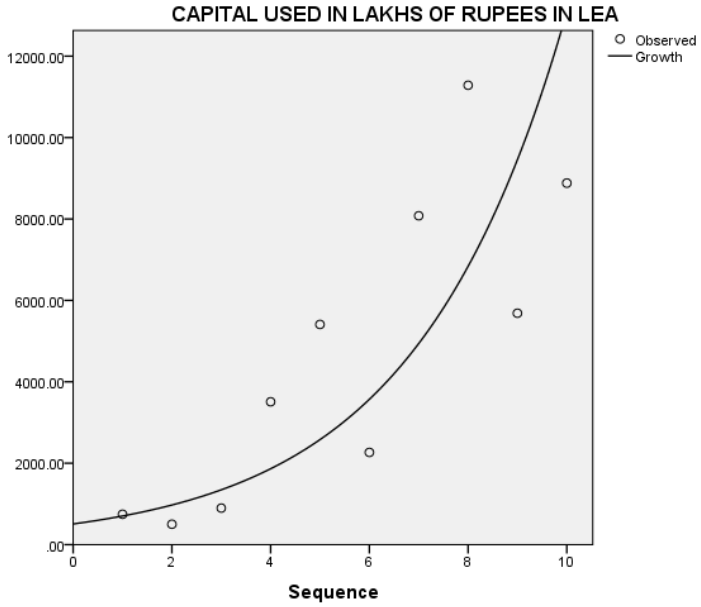
The above computation shows that capital utilized was growing at the rate of 32.50 per cent per year for the period between 2019 and 2020.



The given above table exhibits that the output produced in the year 2020 was Rs.82658 lakhs. The leather industry in Small Scale Industries / /Micro, Small and Medium Enterprises in Tamil Nadu produced maximum output worth about Rs.74931 lakhs in the year 2019. The fag end of the study period, viz 2020 showed a declining level of production of output which was nothing but Rs. 70139 lakhs. The utilisation of labour in leather industry is Small Scale Industries / Micro, Small and Medium Enterprises in Tamil Nadu had a low key profile. Its engagement of labour in the industry is not upto the scratch. By seeing the table, one can perceive easily the disordered employment of labour. It started employing 8473 persons in the year 2020. Then in the next year, it suddenly reduced its utilisation of labour to 7025. Again in the year, it went up to 9736.

Problems in the Leather Industry

The leather industry is one of the main sectors with a significant environmental impact, both in terms of the consumption of raw materials and the disposal of waste.

- Large amounts of water energy are required for the transformation of leather's raw materials.
- Due to the lack of tannery effluent treatment facilities in the country, there were severe shortages in design and product development.
- India's tanneries and factories that produce leather goods have a very small pool of qualified workers.
- The information (guidelines, trends, statistics, etc.) on the market and in fashion, as well as the related services, that are available to Indian manufacturers, are neither reliable nor sufficient.
- The newly developed footwear industry in India is lacking in marketing and product design capabilities.

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Conclusion

The increase in labour productivity played a major role in the growth of total factor productivity. Even though the leather industry was in a strong position during the study period, a significant amount of capital was not effectively utilised, especially after liberalisation. After liberalisation, the leather industry was credited with efficient use of labour and capital. The trend of declining productivity was brought on by a sharp decline in the leather industry's gross value added, especially after 1995–1996. It is necessary to effectively utilise resources in order to raise the gross value added in order to develop the Tamilnadu leather industry. In order to boost the gross value added to the leather industry in Tamilnadu, it is also necessary to strengthen research and development. The Leather and Footwear Sector is one of the 12 Focus Sectors where India can be a Global Supplier, according to the Indian government. The Indian leather industry seeks to increase production, boost export, and subsequently create more jobs by implementing a variety of industrial development programmes and export promotion initiatives; keeping in mind past performance, the industry's inherent strengths of skilled manpower, innovative technology, increasing industry compliance with international environmental standards, and dedicated support from the allied industries.

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