## Review paper on challenges faced by Kanpur based leather exporters

*Mohammad Shiraz* Research scholar, DCBM, Integral University, Lucknow

Dr. Yasir Arafat Elahi Assistant Professor, DCBM, Integral University, Lucknow IU/R&D/2020-000941

#### Abstract

India's leather industry has grown drastically, transforming from a mere raw material supplier to a value-added product exporter. However, in recent time it has gone through various transformation and government policies shift that has affected the growing potential of the industry. Changes such as environmental regulation, demonetization, Goods and service tax (GST), availability of raw material, and recent competition from synthetic leather affect the leather industry in many negative ways. This paper review the current situation of leather industry based in Kanpur based on reports of CLE and other secondary sources. This study helps us review the current situation and conditions that are effecting leather exports and highlights the major challenges faced by leather industry of Kanpur.

This study utilized a grounded theory approach to develop an explanation of the ways in which recent incidents occurs that have affected the leather exporters to the daily workers of the industry. This paper review the condition that have changed due to the awake of recent environmental and economic sanction taken by government and other social groups.

Keywords: Demonization, Environmental Regulation, Leather exports, GST, beef ban, leather challenges, Kanpur leather industry.

## I. Introduction

### **History of leather industry:**

Skin was a valuable commodity even from the times of Vedic literature. There are many reference of the skin of elephant used as cloth by Lord Shiva in the Hindu epic Mahabharata. Again, Lord Shiva, the Greatest Destroyer in the Hindu mythology used to sit on a tiger's skin for his deep meditation and penance. The Bible mentioned "Unto Adam also and to his wife did the Lord God make coats of skins and clothed them" (Genesis 3:21). As well as Holy Quran "He (almighty) created the cattle. They are the source of clothing and food and variety of other benefits for you" (An-Nahl 16:5). The origin of the art rightly be said to have sprung into existence from the misty depths of antiquity.

. The leather tanning activities in local areas were mainly in the hands of the village chamars and at that time they were sufficient to meet the local needs. International export started only during the 1880s. With the outbreak of World War II an impetus demand of leather prove to be a catalyst to the development of leather and leather goods industry in India. While in 1913-14 there were only 25 large units, employing 2,753 workers, the number of units had increased to 114 and the workers to 26, 056, Just Before 1947, though the British had shown considerable interest in leather manufacturing in India and had even established some chrome tanning units in Bengal, however India mainly exported raw hides and skins.

Kanpur or as referred by British Cawnpore came up on the map of the region as an urban centre only in 1778, when a platoon of the English East India Company was deployed to keep a watch on the neighboring Awadh and the Doab regions. The emerging demands of the platoon attracted several small businessmen, craftsmen, and artisans to Kanpur. Leather and leather related products like boots, harness, saddlery, etc. constituted one of the most important requirements of the army. Most of the demand was met by leather craftsmen who had migrated to the nascent urban centre. After the transfer of power to the British crown from the East India Company, Kanpur emerged as an important centre for organized leather production in the region. Several large organizations such as the Government Harness and Saddlery Factory and Cooper Allen & Co. supplied leather goods including army boots, saddlery, harness and other leather products used by the armed forces. The leather industry was boosted by the demands of the several expeditions and campaigns of the British Empire, including the two World Wars. (Silver Jubilee *Commemoration Brochure of BIC*, 1944)

# **Post-independence growth story:**

Kanpur was one of the largest industrial towns in the country and was known as the 'Manchester of the East'. But almost immediately after independence, Kanpur witnessed rapid industrial decline, and by the 1990s the popular media dubbed it a 'dead city', 'graveyard of industries', etc. (Chakrabarti, 1995).

After 1947 the demand for army boots declined, and with it the organized leather industry of the city. Besides army footwear, Kanpur was a large centre for manufacturing chappals (informal footwear) in the unorganized sector. The revival of the cluster took place in the 1970s, when leather started being exported from Kanpur in large quantities. At present this cluster produces leather and leather products like footwear, saddlery and harnesses and other miscellaneous.

After independence, planned efforts were made by the government of India to promote and develop export trade by the adoption of the Export Policy Resolution in 1970 and implementing the recommendations of the Seetharamiah Committee. This led to standardization of material and the development of the tanning industry the leather industry utilizes a by-product of the dairy industry and slaughter-houses and processes it to produce leather and leather products.

### **Current situation:**

The Indian leather industry today has established itself as a prominent industry both in international as well as in the domestic market. Apart from Page | 168 being the ninth largest exporter of leather and leather products it is also the second largest producer of footwear and leather garments, with annual revenue of USD 8,500 million for 2011-12 with exports of USD 4,868.71 million. The sector itself employs more than 2.5 million people and is one of the top foreign currency earners in India. Abundant raw material, skilled work force, compliance with environmental standards and growth shown by the associated industries has helped the sector to grow many folds.

# **Export highlights**

India's leather industry has grown drastically, transforming from a mere raw material supplier to a value-added product exporter.

• Total leather and leather good exports from India stood at US\$ 5.92 billion in FY 2015-16.

• During 2015–16, the major markets for Indian leather products were US (14.25 per cent), UK (12.24 per cent), Germany (11.5 per cent), Italy (6.9 per cent), Spain (5.6 per cent), Hong Kong (5.4 per cent), France (5.3 per cent), UAE (4.5 per cent), Netherlands (3.2 per cent), China (2.8 per cent) and Australia and Belgium (1.45 per cent each).

• At 47.0 per cent, footwear accounted for the lion's share of leather exports in FY 2015-16, followed by leather goods and accessories with 23.0 per cent share, and finished leather with 18.0 per cent share,

leather garments with 9.0 per cent share, and saddlery & harness with 3.0 per cent share.

• Per capita footwear consumption in India is expected to increase up to four pairs, while domestic footwear consumption is expected to reach up to five billion pairs by 2020.

# Product portfolio of Indian leather industry:

- **1.** Footwear
- 2. Finished leather
- **3.** Saddler and Harness
- 4. Leather Goods
- 5. Leather Garments
- **6.** Leather accessories

(Source: Council for leather export)

# **II.** Purpose of the study

Instead of having considerable diverse heterogeneity, the Leather industry of India is striving to achieve its potential best. It is one of the most unnoticed as well as treacherous sectors and very few researches have been carried out in this area till now. Because of the diversity existing in this sector and also due to the fact that economic, social as well as environmental sustainability have become unavoidable factors for any industry nowadays, it becomes absolute essential to analyze the several issues and factors regarding sustainability that can facilitate as well as slow up the attainment of sustainability in the Indian leather industry (Singh and Dhananjai 2013) This study will provide detailed analysis regarding nexus of challenges Kanpur leather industry is facing in the awake of 21<sup>st</sup> century. Leather industry is a valuable foreign exchange earner as well as robust in earning 1 to 2 % of GDP from its nascent stage. This two century old industry which is highly composed of SMEs in a wake of host of environmental and non environmental challenges finding it difficult to grasp a foothold in an already shifting sands of business environment. At the brink of such turning tides it is necessary to carry out a study that could acknowledge the all round challenges Kanpur leather industry is facing.

#### III. Research Methodology

This study is based on secondary information based on sources published in various news daily as well as magazines from time to time, from the interviews given by industry personal, to reports published by different leather institutions. All the related materials is thoroughly researched and carefully put together without any personal bias or prejudices.

# **IV.** Challenges Kanpur leather industry is facing:

- 1) Government Challenges
  - a) **Demonetization**

Page | 171

- b) Beef Ban
- c) Infrastructure (CETP)
- 2) Environmental Challenges.
  - a) Chrome based tanning
  - b) Environmental regulation (ZLD), (UPPCB)
- 3) Technical Challenges.
  - a) Testing laboratory.
  - b) Technical barriers.
- 4) Socio economic challenges
  - a.) Economic barriers.
  - b.) Inadequate Legislation and Lack of Monitoring Facilities
  - c.) Social Barriers
- 5) International Challenges.
  - a) Competition with faux leather.
  - b) Slump in UK demand.
- 1. Government Challenges.

# a.) Demonetization

Demonetization comes as a surprise to many industries specially industries which are labor oriented and cash does need to change hands to get the work done. As far as leather industry is concerned it is mainly composed of small and medium units where most of the work done by individual worker or a whole family on day to day basis. Cash crunch derived by demonetization created a void in labor market as well as small factory owner, without sufficient cash to pay they are unable to carry out even the most basic functions of manufacturing The ASSOCHAM analysis pointed out that leather industry in aforementioned centers is facing grave difficulties in production related activities due to demonetization as they are unable to make remunerate on every level of production be it for raw material, for transportation and the workforce.(Economic times demonetization)

ASSOCHAM had interacted with representatives of industrial bodies and about 100 tanneries in major leather production hub of Agra, Chennai, Kanpur and Kolkata in the last fortnight to assess the impact of the Centre's move to demonetize 500 and 1,000 currency notes in November.

The analysis observed that leather industry in aforementioned centers has been facing grave difficulties in production activity due to demonetization as they are unable to make payments on every level be it for raw hides, coal, lime as well as labor remuneration, and transportation.

In ASSOCHAM study 85% of the respondents said that their production has declined by over 60 per cent while number of workers in leather factories in aforesaid cities has come down drastically by about 75 per cent as they are not being paid properly on time and even industries have also laid off employees due to lack of finances. In the study 60% respondents said they are no longer taking export orders in wake of demonetization as they fear in an environment of cash crunch they are unable to complete order on time. Many of the industry association's representatives in these clusters observed that leather industry would take 9-12 months' time to recover from the impact of demonetization.

### b.) Dependency on meat industry Unavailability of hide/beef ban

Leather industry is based on the by-product of meat industry, Crackdown on unlicensed abattoirs, ban on the sale of cattle for slaughter and cow vigilantism together are causing a big slowdown in the meat and leather industry stated (Live Mint Report on Beef Ban).

Much of India's meat and leather trade takes place in the informal economy, meaning the impact of the closing of illegal abattoirs and ban on trading for slaughter is hard to measure. But cattle markets are reporting a big slowdown in trade and tanneries a shortage of hides. Abdul Faheem Qureshi, a representative of India's Muslim Qureshi community of butchers, said in Uttar Pradesh some markets trading 1,000 animals last year were now down to as few as 100 May (2017), the government decreed that animal markets could only trade cow and buffalo for agricultural purposes such as ploughing and dairy production—a move many in the industry say contradicts its plans to grow leather sales. Industry officials said the shock of the ban, coming on the heels of the crackdown on abattoirs and attacks against cattle workers, meant business would not easily recover. Companies say the government's leather target would be impossible to meet unless the restrictions are reversed. About 30% of hides, mostly from buffaloes, that supply tanneries in the state are from unlicensed abattoirs "More than the economic loss, the government has injected fear," said Chandra Bhan Prasad, a writer and businessman from the Dalit community, as those at the bottom of Hinduism's social hierarchy once called "untouchables" are known. Dalits and Muslims often work in trades that higher-caste Hindus traditionally consider beneath them.

Tannery owner Mohammad Ikram said he was only able to procure 4,000 hides a month—down from 25,000—because even truckers transporting legally obtained cow or buffalo hides fear attacks from vigilantes. He has a month's inventory left, and when that runs out he will have to start shedding staff stated in (NDTV report on cow slaughter)

Jajmau industrial area is one in nearly 400 tanneries at India's largest centre for buffalo-based leather. At the tannery, a group of owners say over the last few years, business has gone down by as much as 70 per cent and the reason is not just crackdown on pollution in the Ganga. It is also the fear of backlash in the controversy and political propaganda over cow slaughter. "I was in Europe to source orders and for the first time in 25 years, I did not get a single one. Maybe the people there watch news and feel we will not be able to deliver because of all that's happening," said Rafat Qayoom, an exporter. At Old Kanpur's Pech Bagh, a street once famous for raw hide go downs, more Page | 175 than a third have shut in over the last two years. Around 100 remain, struggling against mechanized slaughterhouses and harassment of truck drivers who transport animals and hides."All in the name of cow protection," scoffed Mohammad Aslam, who deals in buffalo hides. "There is too much harassment on the roads. It has become very difficult to do this business," he said Procurement of the Raw Materials is one of the prime problems to be treated with utmost care by the firms, because it affects all the other process.

#### c.) Infrastructure (CETP)

The Common Effluent Treatment Plant (CETP) is not equipped to deal with chromium. The plant works under capacity due to insufficient money supply from tanners and government. This result in increase in concentrations of chemical constituents beyond their standard levels laid down by government. The chromium released by the tanneries goes untreated to join river Ganga or agricultural land for irrigation

#### 2. Environmental Challenges.

#### a.) Chrome based tanning

Leather tanneries are the backbone of Kanpur leather industry as Kanpur is specialized in heavy processed buffalo leather as well as finished leather which contributes 3<sup>rd</sup> largest 14% of total leather exports in India. However at the brink of sustainable product market schemes prevalent in global brands, Page | 176 chrome based leather production is gradually losing its shine. International luxury brands like conglomerate Kering has sparked controversy with its desire to put sustainability first and endorse metal-free leather. Andrea Guolo point out whether this is a unique marketing strategy or a genuine spark that will lead the industry into chrome less tanning only time will tell. A research conducted by online leather product magazine leathermag gathers expert opinion about the use of chrome and whether tanneries are really ready for change (leathermag 2018)

Kanpur has nearly 400 registered tanneries, of which about roughly one forth that will be around 90 tanners which produce vegetable tanned leather, around 60 tanneries are such that produce both vegetable and chrome tanned hides, and the rest exclusively chrome tanned (Chakrabarti and Rahul 2009). Kanpur based tanners are dealing with this challenge with making tanning as environmentally sustainable as possible, eliminating most of the polluting content in the process of tanning making leather tanning a sustainable process for all supply chain.

## b.) Environmental challenges

Leather industry anywhere in the world be it two century old Kanpur leather industry in India or relatively new Zigatola in Dhaka Bangladesh, has always been accused of environmental degradation as well as contamination of local water bodies as tanning is a highly water consuming process. Kanpur based tanneries regularly accused of polluting holy Ganges river from quite long, however many studies shows paper industry and plastic industry is no less responsible for the same, however leather tanning is a convenient scapegoat for the government wrath. Due to environmental compliances related shutting down of tanneries there are some points worth highlighting.

• More the 250 tanneries have been served with closing order for 4 months from 15/Dec/2018 to 15/Mar/2019 by environmental body UPPCB.

• Due to shutting down of tanneries 90% production related activities has been hampered due to low demand of raw hides in the wake of tanneries ban raw hide price drop from 2000 rupee per hide to 700 rupee per hide as well as some of raw hide suppliers are selling raw hides to Bengal tanners to as low as 500 rupee.

• Estimated loss of 6000 Cr is incurred by leather industry and loss of goodwill mentioned my CLE president in an interview give to Indian express daily.

• Due to the wake of environmental regulations leather exports is hamper by 29% from 334 million USD to 237.5 Million USD.

• Continuous struggle by Kanpur tanners has resulted in mass exodus by Kanpur tanners. 40 tanners of Kanpur is already been allotted land in Bengal leather corridor due to continuous periodic disruption in tanning activity.

## 3. Technical Challenges.

### a.) Testing laboratory. Technical Assistance Laboratories

International market is getting well informed day by day, most of the buyers required chrome testing certificate as well as several other certificates when it comes to buying leather and leather related goods from India, however there is very poor infrastructure when it comes to lab testing. Poor awareness in leather manufacturer makes this condition worse. Many a times exporters need to obtain certificates at the 11<sup>th</sup> hour which delay there shipments by many days, as explained by Chennai based exporters to the dollar business.com "It takes really long to get the testing clearance for the exports of goods that have many times delayed our shipments. The testing of the leather takes place at Central Leather Research Institute (CLRI), Chennai. Leather samples needs to undergo too many vigorous testing processes and that takes quite a long. Too much time is wasted in getting due clearance. This needs to be minimized (https://www.thedollarbusiness.com). Most of the finished leather and leather footwear producing developed as well as developing countries has research and development laboratories and technological testing facilities. It is been found hat either the R & D laboratories or the testing establishments, or both, have pilot tanneries on individual bases without government support in which technological developments are taken a step further towards commercial leather manufacturing by industry. Some of these tanneries have pilot effluent treatment facilities which are leading the way by helping the local industry adopt relevant methods of emission limitation and treatment. All the same there remains a problem in transferring technology from laboratory and pilot plant of an R & D to somewhere practical in everyday use for the industry

## **b.)** Technical Barriers

By nature, tanners are very conservative. This is not simply inflexibility against change; it is because the quality and nature of leather is prone to change when the parameters of leather processing are altered. Any alteration in the length of processes, process temperatures, float volumes, uptake of chemicals cocktails etc. influence the ultimate character, nature, suppleness, and texture of the leather. Leather being produced from a natural hide which is made up of complex, non-uniform natural protein material, to make quality leather out of it still requires considerable ability and skill in its manufacturing. The adoption environment friendly low waste technology time and again requires a radical modification of most tanning processes while, at the same time, tanners need to ensure that the ultimate product obtained coz of modification retains its marketable properties. Therefore it's a tradeoff tanners suffer due to alteration of tanning process, if a tanner is manufacturing consistent quality of leather which satisfies his customers specification using a process which may be wasteful in water, energy and chemical consumption, he may resist changing his operations to act in accordance with environmental demands. SMEs In most developing countries tanning operations is a family own business, carried out in small to medium scale in a semi-mechanized units, very frequently grouped tightly in clusters which used to be at the outskirts of residential areas. Most of the tanners in such units don't have formal education and have little to no understanding of the complexities of the leather manufacturing, their know how regarding tanning acquired from their elders with negligible perception of environmental protection. Low waste technologies, in a sense, require better skilled and educated personnel with a sense of environmental responsibility and closer technical control than conventional processing. Thus, unavailability of properly trained staff at various levels remains one of the crucial constraints.

### 4. Socio economic challenges.

## a.) **Economic Barriers**

In developing as well as under developed countries, leather industry suffers from economic constraints. They experience the often enormously high cost of capital or inflation rates. Sum of capital related with operating expenses as well as work in-progress has increased along with the obligation to keep higher inventories of chemicals, machinery spares, etc. Because of problems arise from below standard infrastructure in many developing and under developed countries, the tanneries have always try to maintain higher stocks of chemicals as a caution in case of disruption of supply than their tanners in developed countries, against the possibility of delays in delivery from ports. Another drawback is the imposition of import duties on chemicals and machinery. Few specialty chemicals required in tanning are produced in developing countries, although basic chemicals for tanning such as salt, lime, sulphuric acid, sodium sulphate or sodium carbonate may be available indigenously. Most materials related to tanning such as, dyes, fat liquors, special auxiliaries and finishes need to be imported.

### b.) Inadequate Legislation and Lack of Monitoring Facilities:

Pollutant regulation and pollution discharge parameters in most developing countries are by nature rigid and have take no notice of specific site conditions. Instead of a steady approach as called for which would phase setting up of treatment facilities(for example the physico-chemical followed by biological treatment and appropriate sludge handling process) a tanner is under pressure of environmental institutions to put up a comprehensive treatment system and meet all discharge limitations at once which is outside of his financial and technical abilities. However, very few tanners have the necessary process and effluent treatment control facilities and legislation enforcement agencies usually lacks skilled personnel to monitor performance of the installed treatment plants.

### c.)Social Barriers

Governments often shy away from dealing with challenges tanners are facing related to modernizing of the tanneries because of the social and even political disruption that would occur. The problem is further aggravated where tanners are traditionally regarded as socially lower because of the nature of their line of work. This group of people, because of their traditional and cultural discrimination, have amassed considerable political privileges. As a result there are difficulties in altering the structure of artisan industry. Same industry such s paper industry plastic industry also contribute significantly in pollution of river water as well as ground water however any at time of desperate environmental measures only leather tanners are targeted cause of nature of their profession.

### 5. International Challenges.

### a.) Competition with Faux leather

Microfiber leather also known as faux leather is a type of synthetic leather where ultra-fine microfiber bundles just like natural leather fibers and high grade polyurethane resin are combined together to imitate the infinitesimal structure of real leather. The course of action used to create microfiber gives the final product a similar amino structure almost the same as genuine leather. Microfiber leather is a comparatively new technology in the market that has only recently been incorporated into several applications in place of genuine leather.

Rapid changes in consumer purchasing habits and lifestyle have led to shift in consumer preference from genuine leather to microfiber synthetic leather. Outcome of which, domestic and international companies are making significant investments in synthetic (faux) leather instead of genuine leather. Because of wonderful performance, microfiber synthetic leather has been the best vegan leather, the best possible substitute of real leather and the best leather substitute materials, can replace leather flawlessly.

On the basis of microfiber product category the faux leather market is segmented into the following:

- Bio-Based Leather
- PU Synthetic Leather
- PVC-Based Synthetic Leather

PVC-Based Synthetic Leather is responsible for one-third of total microfiber synthetic (faux) leather market. However, at the same time Microfiber Synthetic Leather market is expected to expand at a CAGR of 4.9% over the following year 2020.

Faux leather have several Application, the market is segmented as follows:

- Clothing
- Furnishing

- Bags, Purses & Wallets
- Footwear
- Automotive
- Other Applications

Home furnishing segment is expected to dominate microfiber synthetic leather market over the forecast period. However, other rapidly growing sector of automotive ensures high growth opportunities for microfiber synthetic leather market. (grandviewresearch.com)

# b.) Slump in UK demand.

"The global slowdown and the weakening of euro as well as Britain exit from European union – Europe alone accounts for a major chunk of Indian leather exports – has led to the fall in exports. The abrupt drop in demand has resulted in accumulation of stocks as importers based in Europe are postponing their due shipments," (Waki, the dollar business magazine).

# V. Conclusion:

This is one paradox – the leather industry. On one end, it is blamed for contaminating rivers and creating health problems, while on the other, its toxicity gives way to purity, and it is heralded as one of leading foreign exchange earners for India and the employment center of about 25 lakh citizens. Seems like Odd truths however a really. And lately, this 'focus sector' in the Make in India program seems to be experiencing chill winds from various directions. Will it be too late before the bottom line finally turns red? (kapoor, shivani 2015)

In the light of so many disturbances, the policy reforms and incentives provided to the leather exporters come out to be nothing more than a few peanuts. This needs to change if India doesn't want to lose on some valuable export orders.

Without a doubt the leather industry of India has a huge potential to earn truckloads of precious foreign exchange for the country. All the leather industry require is a little thrust from the policymakers to move in motion by right polices and an infrastructure which is at par with other leather exporting hubs in the world. In a packed out market of foreign labels of luxury leather products, several Indian names have acknowledged there presence on international stage. Isn't this a matter of great pride? And when those concerned with leather industry work hard against odds to make a mark, why should they lose out to the government's apathy? They aren't banking on some divine intervention; all they are asking for is that the government should show some mercy and care for the economic interests of the stakeholders of one of India's prime export sectors.

### VI. References

- Asgedom, G. (2008). The Performance and Determinants of the Ethiopian Leather Export Sector (Master's thesis, School of Graduate Studies, Addis Ababa University, Ethiopia).
- ASSOCHAM survey-cum-analysis on 'Impact of demonetization on leather industry.'
- Bekele, M. and G. Ayele. (2008). The Leather Sector: Growth Strategies through Integrated Value Chain. Ethiopian Development Research Institute (EDRI), Addis Abeba, Ethiopia.
- Chakarbarti, Manali and Rahul Verma. "Labour in Global Value Chains: A Study of the Leather and Footwear Manufacturing Cluster of Kanpur." No.47 (March 2009) <u>https://rupe-india.org/47/leather.html</u> <u>https://www.indiatoday.in/fyi/story/the-toxic-cost-of-kanpurs-leather-industry-329990-2016-07-19.</u>

--, 'Kanpur: A City that Was'. Seminar, 432, pp 34-37.

- Chandra, Rowland, N.L., Arts in Industry Through the Ages: Monograph Series on Bengal, Navrang, New Delhi, 1975. p108
- Cow slaughter. https://www.ndtv.com/india-news/kanpurs-leather-industryshrinks-as-controversy-over-cow-slaughter-grows-1437103.

Dollar

business

magazine.

(https://www.thedollarbusiness.com/magazine/leather-industry---yet-toput-the-best-foot-forward/32843)

Ghoshal, Sutanuka, Economic times, leather product hit-hard` by Demonitization,

https://economictimes.indiatimes.com/news/economy/policy/leatherproducts-trade-hit-hard-by-demonetisation

 $\underline{assocham/articleshow/56061912.cms?utm\_source=contentofinterest\&utm\_source=contentofinterest\_source=contentofinterest\_source=contentofinterest\_source=contentofinterest\_source=contentofinterest\_source=contentofinterest\_source=contentofinterest\_source=contentofinterest\_source=contentofinterest\_source=con$ 

\_medium=text&utm\_campaign=cppst.

- Holy Bible (Genesis 3:21).
- Holy Quran (An-Nahl 16:5).
- Jordaan, A.C., and Eita, J.H. (2007). Determinants of South Africa's Exports of Leather Products (Working Paper Series: 2007-21). South Africa, Pretoria: Department of Economics, University of Pretoria.

Kapoor, Shivani. September 2015 Issue, The Dollar Business

Leather Industry and Exports Dec 2019, http://www.ibef.org/exports/leatherindustry-india.aspx.

LivemintreportonBeefBan.https://www.livemint.com/Politics/3duNgW1a0MFb29Hl412UJL/Cattle-<br/>slaughter-ban-ripples-through-Indias-leather-industr.html

"Move over metal: sustainability is metal-free leather tanning." 7/Aug/2018 *Leathermag* <u>http://www.leathermag.com/features/featuremove-over-</u> <u>metal-6713513/.</u>

ONICRA credit rating agency report 2014.

- Prasad. P.R. and Rajanikanth. G., Development of Scheduled Caste Leather Artisans- Profile, Problems and Prospects, Discovery Publishing House, New Delhi, 1991. P 89
- Satish Chandra Singh and Dhananjai Gupta (2013) Sustainability: A Challenge for Indian Leather Industry.
- Silver Jubilee Commemoration Brochure of BIC, 1944 <u>https://rupe-india.org/47/leather.html</u> Silver Jubilee Commemoration Brochure of BIC, 1944; Investors India Yearbook, 1947.

Shivani Kapoor. September 2015 Issue, The Dollar Business.

Sharif, D.M.I., and Mainuddin, K. (2003). Draft Study on Environmental Requirements, Market Access and Export Competitiveness for Leather and Footwear in Bangladesh. Sub-regional Workshop on Environmental Requirements, Market Access/ Penetration and Export Competitiveness for Leather and Footwear Bangkok.

Seetharamiah Committee

Vijay Kumar, Leather Industry Problems and Prospects, Yojana, Vol. 40, No. 5, May, 1996. Page no 1 Yamamoto, G.T. (2005). Analyzing Japanese General Trade Companies 'SoghoShosha's as a System (Master's thesis, M armara University, Social Sciences Institute. *Tathapi* (UGC Care Journal)