Leather Industry: At an Edge

Abstract:

The aim of this paper is to describe the fact that leather goods industry in Pakistan is a substantial foreign exchange earner and presents a high share in the manufactured exports. The industry is labor intensive and is still not run on the mechanized lines. A sector study has shown that an improvement in the quality of leather and leather production might be yield in the high pay-off in terms of capturing better prices in the export markets. It depicts that Pakistan has a high comparative advantage in leather products over all. The paper highlights the problems faced by the leather industry and identifies some immediate actions to be taken to improve the performance of the leather industry.

Introduction:

At the time of independence there were only a few tanneries producing sole leather at a small scale. In the early days of independence some tanneries were established in Karachi. In 1950's some were established in Lahore and adjoining areas. The industry has flourished rapidly since then. During 1950s well-equipped tanneries were set up at Karachi and Lahore, while during 60s and 70s more units were established at Hyderabad, Kasur, **Sialkot**, Multan, Sahiwal and Gujranwala. Starting with the production of picked and vegetable tanned hides and skins, the tanneries, today are producing not only wet blue and crust but also fully finished leather.

Leather industry, including leather products, is the second largest export earning sector after textiles[1] in Pakistan. Currently, **Sialkot** sector of Leather is contributing around USD 457 million[2] in 2013 but has the potential to multiply volume of exports with the improvement of quality and diversification in different range of products, specially garments and footwear. Leather garments and footwear is a job-oriented sector providing employment to a very large segment of the society besides earning foreign exchange for the country.

The leather industry consists of six sub-sectors namely, Tanning, Leather, Footwear, Leather, Garments, Leather Gloves, Leather Shoe Uppers, and Leather Goods. The Tanning industry plays a vital role in the progress of these sub-sectors by providing the basic material i.e. leather. Today, Pakistan is among the leading countries in the production of Leather Garments and Gloves. The leather and leather made-ups industry plays a significant role in the economy of Pakistan and good share in GDP.

Production Capacity:

TABLE 1: TOTAL PRODUCTION CAPACITY OF OVERALL TANNERIES IN PAKISTAN

Particulars	Estimated Production Capacity	Actual Production	Utilization Rate
Tanned leather	90 Million Sq meter	60 Million Sq meter	67%
Leather Garments/ Apparels	7 Million Pieces	5 Million Pieces	71%
Leather Gloves	10 Million pairs	5 Million pairs	50%
Leather Footwear	200 Million Pairs	100 Million Pairs	50%

Source: Pakistan Tanneries Association

Against a capacity of producing 90 million square feet of tanned leather, the tanneries are presently producing only 60 million square feet tanned leather per year. Presently, there are some 461 leather garments/apparels making units, which annually produce some 5.0 million pieces against a capacity of producing 7.0 million pieces. The 524 footwear units in the country are currently

[1] Pakistan Tanneries Association (PTA)

[2] Figure from ITC Trade Map

producing 100 million pairs against a capacity for producing 200 million pairs, while 348 leather gloves units are producing 5.0 million pairs against a capacity of making 10 million pairs annually. These statistics clearly show that the capacity of this sector remains highly under-utilized.

Sources of Raw Material:

Pakistan is fortunate that the raw material required by the industry is available in the country in abundance. Local availability of raw materials and low wage cost gives the country a competitive edge in the world market. In the leather industry the raw materials are by-products of the meat industry, with the meat having higher value than the skin. Hides and skins are also used in the manufacture of glue and gelatin. The primary sources of raw material for the tanning industry are hides and skins from animals slaughtered for human consumption.

The following are the types of basic raw materials which are being used by this industry:

1. Buffalo:

Buffalo is considered as the specialty of Pakistan in World, because of its ample availability in Pakistan.

2. Cow:

The cow hide is considered a superior raw material upon buffalo because of its fine, tight and comparatively uniform structure.

3. Goat:

It is good for making shoe upper leathers, garment and goods leather.

4. Sheep:

Leather made from sheep skin has a very good and softer touch and is considered best for leather garments.

The industry meets 75% of its needs of raw hides from local sources while rest is met through imports. Pakistan imports raw hides from Saudi Arabia, Iran, and China, Dubai, Sudan, Kenya, Australia and Italy.

Training Institutes:

There are various training institutes that have been established to provide leather based academic degrees. Some of them are:

1. National Institute of Leather Technology, Karachi (NILT).
2. Leather products development Institute, **Sialkot** (LPDI).
3. Institute of Leather Technology, Gujranwala (ILT).

Production Process:

There are a number of processes whereby the skin of an animal can be formed into a supple, strong material commonly called leather.

1. Vegetable-tanned leather is tanned using tanning and other ingredients found in vegetable matter, tree bark, and other such sources. It is supple and brown in color, with the exact shade depending on the mix of chemicals and the color of the skin. Vegetable-tanned leather is not stable in water; it tends to discolor, and if left to soak and then dry it will shrink and become less supple and harder. In hot water, it will shrink drastically and partly gelatinise, becoming rigid and eventually brittle. Boiled leather is an example where the leather has been hardened by being immersed in hot water, or in boiled wax or similar substances. Historically, it was occasionally used as armor after hardening, and it has also been used for book binding. This is the only form of leather suitable for use in leather carving or stamping.

2. Chrome-tanned leather, invented in 1858, is tanned using chromium sulfate and other salts of chromium. It is more supple and pliable than vegetable-tanned leather, and does not discolor or lose shape as drastically in water as vegetable-tanned. Also known as wet-blue for its color derived from the chromium. More esoteric colors are possible using chrome tanning.

3. Aldehyde-tanned leather is tanned using glutaraldehyde or oxazolidine compounds. This is the leather that most tanners refer to as wet-white leather due to its pale cream or white color. It is the main type of leather used in chrome-free leather often seen in infant's shoes and in automobiles that prefer a chrome-free leather. Formaldehyde tanning (being phased out due to its danger to workers and the sensitivity of many people to formaldehyde) is another method of aldehyde tanning. Brain-tanned leathers fall into this category and are exceptionally water absorbent. Brain tanned leathers are made by a labor-intensive process which uses emulsified oils often those of animal brains. They are known for their exceptional softness and their ability to be washed.

4. Synthetic-tanned leather is tanned using aromatic polymers such as the Novolac or Neradol types. This leather is white in color and was invented when vegetable tanning were in short supply. Melamine and other amino-functional resins fall into this category as well and they provide the filling that modern leathers often require. Urea- formaldehyde resins were also used in this tanning method until dissatisfaction about the formation of free formaldehyde was realized.

5. Alum-tanned leather is tanned using aluminum salts mixed with a variety of binders and protein sources, such as flour, egg yolk, etc. Purists argue that alum-tanned leather is technically "tawed" and not tanned, as the resulting material will rot in water. Very light shades of leather are possible using this process, but the resulting material is not as supple as vegetable-tanned leather.

6. Rawhide is made by scraping the skin thin, soaking it in lime, and then stretching it while it dries. Like alum-tanning, rawhide is not technically "leather", but is usually lumped in with the other forms. Rawhide is stiffer and more brittle than other forms of leather, and is primarily found in uses such as drum heads where it does not need to flex significantly.

Stages of Leather Formation:

1. Warehousing and sorting

In the raw material area the skins are preserved in salt, stored in controlled cool rooms and before processing, presorted for quality and weight.

2. Soaking

The skin is soaked to remove dirt and salt.

3. De-Fleshing

During this process tissue, flesh and fat remnants are removed by a roller mounted knife.

4. Liming

By adding lime and sulphur compound the hair is removed from the skin.

5. Bating, pickling, tanning

During bating and pickling the skins are treated with acid and salt in preparation for tanning. During tanning the skin fibres absorb the tanning agents. That's when the skin becomes leather.

6. Samming

During this process water is removed.

7. Splitting

In order to achieve an even specified thickness the leather is reduced in substance. The resulting split-leather can then be processed further as suede.

8. Skiving

The grain leather is brought to an even thickness. Irregularities are removed from the reverse side and the leather is separated into color-batches.

9. Sorting

The leather is sorted into various quality grades.

10. Neutralizing, filling out, dyeing and greasing

The acid resulting from the tanning process is neutralized. Then the dyeing takes place, where appropriate with anilin-dye-stuffs. The greasing procedure will finally achieve the correct softness.

11. Drying

Two methods are used to dry leather. The vacuum process during which moisture is removed by suction and the hanging process, when leather is hung and taken through ovens.

12. Staking

Following drying the leather is mechanically staked in order to soften it. Further processes take place in preparation for finishing.

13. Finishing

Here the leather is given its final surface treatment and look. Through processes of base coat, coloring, embossing, ironing the leather becomes, depending on the demands of fashion, matt or shiny, two-tone or uni-colored, smooth or grained. The art of finishing lies in working in wafer-thin layers without disturbing the natural look of the leather and its characteristics such as suppleness and breath ability.

14. Quality Control

In between every process quality is controlled. Final control checks to ensure each individual production is to specification and sortation into various trades.

15. Dispatch

The leather is measured electronically, wrapped and dispatched.

Technological Level:

The tanning industry in Pakistan uses machinery which are out dated and believed to be imported from various countries in the 1970‘s and 1980‘s. Though, the country took advantage of these second hand machines by bringing in a large

amount of foreign earnings, it unable to create a friendly environmental atmosphere in the process. A part of the country is subjected to air pollution due to the burning of chemical residual during tanning process into the atmosphere. This pollution has a dangerous effect on the health of the local population, mainly in the cities of Karachi, Kasur and **Sialkot**.

The leather industry has implemented many progressive interventions and technologies in the past to deal with its numerous environmental and energy challenges. The representative association of leather industry i.e. Pakistan Tanners Association (PTA) has long been facilitating a number of initiatives to address the environmental issues of the industry. This has resulted into a more competitive, sustainable and progressive leather industry of Pakistan.

For sustainability of already implemented steps and in view of the continuous needs of the leather and tanning sector, Programme for Industrial Sustainable Development (PISD) will work and transfer environmental and energy-related knowledge and technologies to the industry in order to address the ongoing issues of leather sector of Pakistan.

Overview of Government Policies and Incentives:

To stem decline in leather exports, the government has announced a number of steps for giving a boost to leather apparel industry in its 3-year strategic trade policy framework 2009-12. These steps, as announced by federal minister for commerce, on July 26, 2009, include facilities from Export Investment Support (EIS) Fund for procurement of expert advisory services, matching grant to establish design studios/centers and establishment of research and development centers in Karachi and **Sialkot**. In addition, this sector would be able to avail EIS Fund facilities that include sharing 25 per cent financial cost of setting up laboratories and matching grant for setting up of effluent treatment plants.

Demand of Leather Industry from the Government:

1) The leather garment industry strongly recommended for imposition of 20 per cent export duty on export of semi-finished and finished leather in the new trade policy (2012-2015). This would help availability of good quality leather produced locally.

2) 'Fox Furs' are much in demand abroad. This should be removed from negative items list under import/export order. Export of garments using allowable fox fur trimmings for decoration should also be permitted for boosting export of value added leather garments.

3) There is an immediate need for establishment of a Leather Board in Pakistan which should operate as an independent body and funded by the government from export development fund. The board should be headed by a person exporting value-added leather products.

4) Value-added exports like leather garments where there cannot be any further value-addition should be exempt from Export Development Surcharge.

5) Re-export of temporarily imported goods supplied by buyers should be allowed without sight letter of credit or advance payment if supplied as free of cost. The present policy does not provide provision for export of such goods in original and unprocessed form due to cancellation of export order or changes in design/style of the order.

SWOT Analysis of Leather Sector:

Strengths:

- Easy availability of raw material
- Management skills learned through experience.
- Easy availability of labor.
- Presence of institutional support for technical, services, designing, manpower and marketing.
- Export market in Europe, USA, and Far EAST.
- Export friendly Government Policies
- Pakistan has a comparative advantage in Leather Garments, Gloves, and Leather Goods for Consumer use (clothing accessories) and Finished Leather items (Leather Hides, Skins, Parchment whole skin dresses).

Weaknesses:

- Insufficient level of modernization and technology up gradation
- Low labor productivity
- Lack of confidence among SME's for further growth
- Environmental problems
- Lack of market information

Threats:

• Competition from regional players such as China, India, Turkey, Thailand, Indonesia, etc.
• New regulations of environmental and social compliance.

Opportunities:

• Room for capacities utilization
• Product diversification and new markets.
• Pakistan can diversify further in Leather Goods for industrial use sector.

Issues Faced by the Industry:

- ✓ There are 4 factors that are significant for the development of any industry, which are:
  - Country Image
  - Logistics
  - Price
  - Quality
- ✓ In Pakistan, minor attention is given to these four aspects which are otherwise essentials for success.
- ✓ The law and order situation is making foreign investors reluctant to invest
- ✓ **Livestock Industry:**
  - In Pakistan, meat industry is seen as of prime importance, leather is just seen as a by- product.
  - This perspective needs to be changed for the sophistication of local demand.
- ✓ **Effluent treatment plant & reach agreement:**
  - This plant has been made in Korangi with the collaboration of Dutch government.
- ✓ **Fashion Industry:**
  - If the fashion industry flourishes and creates awareness about its products, the leather industry will get a boost as more and more people will be inclined to buy leather based products(such as belts and bags)
- ✓ **Banking and finance industry:**
  - The credit availability to the leather tanneries is an ongoing issue.
  - The borrowing cost is high which deters further investment in the industry.
  - The initiative taken by the government to reduce the Bank‘s spread from 3% to 2% can help the industry grow.
- ✓ **Dyes and chemicals:**
  - The local chemical and dye manufacturing companies are not supporting the Leather industry. Other than a few Multinational Corporations none of the companies meet the international standards. Local companies do not manufacture chemicals required by leather industry. Tanners are forced to buy chemicals from the Multinational corporations at high prices or import them.
  - Our local chemical and dyes Industry should address various health issues associated with the chemicals they produce in order to abide by all the set international regulations.
- ✓ **Training, research and educational institutes:**
  - Institutes are not working to their full capacity due to the lack of students, faculty, and proper academic curriculum.
  - The NILT (National Institute of Leather Technology), LPDI (Leather Product Development Institute has taken initiatives to train individuals in Leather and Leather products but they are not capable of attracting people.
- ✓ **Gaps in the qualities of local supplies:** This is reflected in the inefficiency of the local machinery and dyes manufacturers. Our local machinery and dye manufacturers are not competent enough, forcing tannery owners to import machines and chemicals. 80% of the chemical dyes used are imported.
- ✓ **Cumbersome regulatory procedures:** Export rebates of up to 23% were given up till 10 years ago, which has now been reduced to a meager 0.8 to 1% for finished goods, 0.22% for apparels, 1.76% for gloves and 2% for footwear. This reduces our ability to compete with countries giving high export rebates. Over and above this, the Pakistan Leather Industry is subject to high L/C Margin.

- ✓ **Control on Smuggling & Diseases of Livestock:**
  Leather manufacturing sector in Pakistan can also suffer because of massive smuggling of livestock to other countries, shortage of raw material and absence of the organized dairy farming in the country. Steps should be taken to overcome these problems
- ✓ **Disease Control:**
  Moreover, diseases in the livestock in Pakistan can prove hurdle in the manufacturing and exports of finished products of leather. Concrete measures need to be taken to overcome this threat to the livestock. As a result the live animals are suffering from different diseases that damage the quality of the leather and tarnish the image of products at international level.

Recommendations:

- ✓ **Introducing Brand Names:**
  Pakistani Leather and Leather products have carved a respectable place in the world market especially leather jackets are much in demand. They are sold under the foreign renowned brand names. Made-in-Pakistan label and brands born in Pakistan have yet to come. Steps need to be taken by the industry in this regard.
- ✓ **Focusing on Footwear Sector:**
  Footwear, the largest segment of the leather industry around the world has been surprisingly neglected in Pakistan. Foreign franchised companies have become household names in Pakistan. This is despite the fact that the entire stuff and skill they use belong to Pakistan. Pakistani companies should seek partnership with international brand producers by offering them attractive incentives in order to promote Leather footwear industry.
- ✓ **Tackling Environmental and Labor Issues:**
  Combined effluent treatment plants need to be built so that hazardous chemicals from the tanneries do not affect the environment. Moreover, the industry needs to tackle all the labor issues to which the consumers in the importing countries are sensitive to. It needs to be ensured that the leather industry in Pakistan adheres to the working condition requirements that have been developed by international bodies, particularly, the associations of leather industries in the importing countries of the west.
- ✓ **Reduction of Duties on Machinery:**
  Major trade shows, fairs and other promotional activities should be used to build Pakistani brand names, and thus improving the position of ―Brand Pakistan. E-marketing- the use of the internet in order to make people more aware of leather industry in Pakistan.
- ✓ To attract investment, Government should provide investment incentives, higher duty drawback/ tax rebates, 6% R&D subsidy to the new startup companies in the leather sector.
- ✓ Sustainable Pakistani leather sector competitiveness requires greater concentration on fashion and design. Efficient fashion industry will bring new design and innovative designs in leather garments and hence leather sector will be promoted.
- ✓ The industry has some excellent clients in the US and Europe and building on these with a marketing campaign, perhaps allied with warehousing assistance, there is potential for Pakistan to compete for clients with countries like Turkey who deal in a generally higher price bracket.
- ✓ Commercialization of livestock farming to make the standard of breeding practices better.
- ✓ The people at the slaughter houses who skin the animal, should be made more aware of the use of those hides and skins and how a little cut on the skin can make the whole skin useless. Government should promote established of training institutions to train people at slaughter houses.
- ✓ More emphasis on the foot wear, as value additions brings more revenue.

- ✓ Differentiated products in terms of design. This will bring diversification in leather portfolio, hence more products will cater vast range of customers.
- ✓ According to Porter's diamond model, domestic rivalry is healthy but if Pakistan is not very capable of that, the firms in the industry should at least try to collaborate and thus contribute global competitiveness together.
- ✓ The cost of production is also very high in Pakistan as compared to our competitors like China, India and Bangladesh. This is mainly due to the utilities, import costs and taxes. Government should take strong initiatives on immediate basis to provide incentives and subsidies to cut down the production cost. The most important agenda should have been for the Government right now is to provide utilities at low cost and enhance the productivity in order to save leather industry.

Conclusion:

Pakistan has a comparative advantage in Leather Garments, Gloves, finished Leather items and Leather footwear sector. Pakistan's market is quite dynamic where availability of raw material and cheap labor is the strength of our market. Pakistan has insufficient resources in terms of institutional support for technical, design and marketing services. In Pakistan, many skins and hides are affected by pre-slaughtering, during slaughtering and post-slaughtering stages.
