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RESEARCH ARTICLE

THE INDIAN DENIM INDUSTRY IN A MARKET DRIVEN ENVIRONMENT.

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Abstract

The Indian denim market is a billion dollar industry and has steady growth year after year but the average denim apparels used and owned by Indian consumer is lower in comparison to United States, Brazil, Europe and China. The Indian denim industry is growing with introduction of new technologies and changing trends. With recent substantial growth in cotton production demonstrates the huge potential that exists for denim. As future business increases a common objective of companies is to have long-term success by having sustainable competitive advantages. Increasing concern about the environment has forced industry to innovate and reduce its environmental impact. The time has arrived where ignoring environmental impacts is no longer viable.

This study is an analysis of the Indian Denim industry, the current scenario and challenges, the growth opportunities, key trends, growth drivers and major issues being faced in the Indian denim market and the future potential in the Denim industry as Manufacturers are facing increasing pressures to produce products in an environmentally-sustainable manner, particularly those who compete in the global market and have to comply with foreign environmental standards and regulations. Consumers are also becoming more critical of manufacturers' environmental performance. Textile companies already operate under strict environmental regulations to protect their exports

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Introduction:-

One of the greatest challenges of this century is to ensure sustainable balanced development. The denim industry is regarded as having one of the worst environmental and ethical footprints in fashion industry. According to a Greenpeace report to produce two billion pairs of jeans every year, it takes 1.7 million tons of chemicals and water consumption for production can go as high as 7,000 litres per one pair. Thus, it is essential that denim brands hold themselves accountable and invest in innovation for the sake of sustainability and reduce environmental abuse further down the supply chain

The response of industry towards environment strategies developed in two era beginning from 1970. In the first era, companies faced regulations for which they had to act through improvements in Air, water and soil. The early approach was a reactionary approach and has been phrased as "resistant adaptation" (Fischer & Schot, 1993) of

industries. The norm in this era was “Compliance”. As these practices were accepted by industries, the differentiation offered reduced and environmental practices improved.

Next came the sustainability era, which is on the rise in today’s business situation. The sustainability approach is in line with the Bruntland Commission report titled “Our Common Future” (WCED, 1987) which defined sustainable development as "development which meets the needs of current generations without compromising the ability of future generations to meet their own needs". It advocates economic and social development, mainly for a low standard of living people while underlining the importance of protecting the natural resource base and the environment. The sustainability initiative incites industries to look beyond and redesign their products and processes for the environment. Sustainability’s early definition was regularly associated with just environment preservation (Anderson, 1998; Hart, 2007; Hart & Milstein, 2003; Hawken, 1993; Schmidheiny & Zorraquin, 1996; Winsemius & Guntram, 2002) and societal apprehension associated more with Corporate Social Responsibility (CSR) (Burke & Logsdon, 1996; Wood, 1991), a commonly accepted and current model of sustainability concept includes as part of its definition (Laszlo & Brown, 2014); the Triple Bottom Line (TBL) model which places equal importance on three factors in strategic decision-making: the environment, society and economy (Elkington, 1994; Gibson, 2001). Specified that all stakeholders economic needs can be served when business act in harmony with society and environment (Bright, Fry, & Cooperrider, 2006, Laszlo, 2008; Laszlo & Brown, 2014).

Over the years, the sustainability approach has gained momentum due to various researches undertaken. Many saw the rising opportunity for differentiation with the growing awareness for the environment and several firms used strategic approach in their environmental practices to create a competitive advantage which acknowledged that environmental policies need to be based on economic business fundamentals. The topic of sustainable competitive advantage has been the dominant topic for several years (Bain, 1956; Kay, 1994; Porter, 1980) Sustainable competitive advantage is more than just one product or service. An important component of a company’s sustainable competitive advantage is the leadership that a company’s leader provides. No other single entity has more control or influence over an organization than its leader and the leadership they demonstrate (Burns, 2008) The existing products and services “which made a company successful yesterday are likely to work today as the business environment change dramatically” (Oliver, 2000). “The term ‘sustainable’ considers the protection of such attributes and resources have to offer over some usually undefined period of time into the future for the organization to maintain its competitiveness” (Chaharbaghi & Lynch, 1999).

The strategic approach lessened the risks associated with environmental performance –risks of facing government and competitor’s measures, public outrage and employee issues. But pursuing improved environmental performance alone does not create opportunities of advantage and profitability.

Internet explosion has helped spread environmental concerns that earth faces, and its sustainability. The internet has also contributed to improving awareness in society in general. Many large business and industries have realized that sustainability is no longer an option. While it is understandable that large businesses have the knowledge and resources to undertake sustainable practices in their own businesses, small companies have Neither the resources nor the cash required for setting such practices within their operations. A deepening of the current crises is possible in the next decade, as an increasingly, diverse and interconnected crowded world tackle threats that it is not equipped to withstand. Resource scarcity, such as energy, land, water, food, and space for emissions, can aggravate existing problems.

Smes (small and medium enterprises) and the environment:-

The small and medium enterprises constitute an important segment of the Indian economy. This sector contributes to about 8% of the GDP, 45% of the manufactured output and 40% of exports (Report of Prime Minister's Task Force on MSME, 2010). This sector’s contribution to employment is second highest next to only agriculture (SME World). In spite of business advantages of proactive environmental strategies, SMEs generally adopt reactive strategies which Focus on compliance rather than sustainability (Hobbs, 2000). Recent studies show that the firm size is one of the major determinants of a firm’s green strategy –environmental actions undertaken are inversely proportional to the company size (Bianchi & Noci, 1996) . In the 2011 survey on Sustainability and Innovation, the MIT Sloan Business School too had similar findings (MIT Sloan Sustainability Dashboard).

SMEs pursue business gut feeling to reduce resources use and wastage. But when faced with the prospect of no short term gains, SMEs may find these investments as a non priority expense (Esty & Winston, 2009). The cumulative

contribution of SMEs to pollution and environmental concerns is not documented, yet is suggested to be equal, if not more, by some researchers (Hobbs, 2000). Thus, the potential contribution of SMEs to cleaner environment may not be realized yet. In India, present policy and legal frameworks do not encourage and support SMEs in this direction.

The scientists, technologists, designers and retailers over the last century have been innovating to explore the mystique of this fascinating product Denim. In textile development as consumers preferences are rapidly changing, endurance and accuracy is a never ending process for improving material performance and is an important emerging field with tremendous growth and high market potential.

Research problem:-

There's an over-supply of denim worldwide and global denim prices are relatively weak due to lesser demand, as more consumers are switching to blended fabrics. The overcapacity situation has further dampened price. Though capacity will be reduced around the world, countries like India have constructed new mills and sustainability has become very crucial and important.

Objectives:-

1. To understand the denim industry in India
2. To examine the driving factors for denim market
3. To examine the growth potential and current scenario for denim industry
4. To examine the future potential and challenges facing a sustainable industry.

Research Methodology:-

The study is intended to explore the objectives set for the study. Secondary data is used for the appropriate conduct of the study. Secondary data was collected through government sites, reports, books and journals.

Limitations:-

- a. The study was limited to Denim Textile market
- b. The study was limited to the subject of Denim sustainability and innovation.

The Indian Denim Industry:-

According to UN , Comtrade 2013 report, Although India is the second largest textile manufacturer and second largest exporter globally, it only contributes ~5% towards the world textile trade compared to China's ~39%.

During late 70's, Denim became popular for casual wear and was used by high-fashion designers a few Indians wore Jeans manufactured in Europe and United States but not produced in India. Denim production technology was imported to India during 1986-87.

The Indian textile industry is fragmented into organised and unorganised sector. The unorganised sector consist of handloom, handicrafts and sericulture operating on small scale with traditional tools and methods and the organised sector with modern machinery and techniques consisting of apparel, spinning and garments segment. The Indian denim industry which evolved in 1986 is currently a dynamic hub of over 32 denim mills with capacity ranging from 10 to 110 MMPA production .The total capacity of the 32 denim mills together is 692 million meters and exports 128.4 million meters per annum. Indian Domestic Market is around 480 Million Mtrs. (equivalent to 0.35 Pair of Jeans / Year or approx 70% consumption of total production).

In the world India is the second largest producer of cotton yarn and has an integrated value chain starting from fibre to retail for denim products. India's Denim apparel production is a fragmented industry with 20-30 percent only manufactured by organised units with production mainly concentrated in western and northern India, namely, Mumbai, Ahmedabad , Bangalore ,Delhi and NCR with more than 45 percent contribution coming from Ahmedabad as the major production hub. Around 60 percent Unbranded denim products also dominate the market .The competitive domestic market with increased capital requirement, and moderate entry barriers provides less product differentiation scope in this industry .

The major manufacturers are Nandan Denim Limited, Arvind Limited, Aarvee Denims and Exports Ltd., Soma Textiles, Raymond Limited. Manufacturers like Arvind mills focus on exports. Most manufacturers get majority of their revenues from domestic markets which makes the domestic denim industry highly competitive. Lots of change

in denim fashion came in the last 15 years, with new specialized yarns introduced in new colours, toppings and over dyeing coating. Also new range denims like Dry and wet washes with laser and ozone technique changed the age old classical Blue Denim to fashion Denim.

The forecasted global denim market is to reach USD 64.1 billion by 2020. The Indian denim industry has shown continual growth over the years and currently, its utilization levels are pegged at 80-85%. According to World Textile Exports, 2013, The Indian denim market was worth 13,500 Cr. in 2013, and accounted for 5 percent of the country's total apparel market and contributes ~5% to the global scenario. Driven by volume growth it is projected to grow at a CAGR of 15 percent with 27,200 Cr. markets by 2018. India Denim manufacturing and consumption has grown at a compounded annual growth rate (CAGR) of up to 15% over the last decade and is likely to grow at similar levels over next few years and The India's denim manufacturing capacity is expected to cross 1.5 billion metres by 2020. Currently, the jeans market is under penetrated in India with per capita consumption of 0.3 pairs of jeans per year compared to developed nations like the US and EU which is two to three pairs per year. This represents a very significant growth potential for the industry in India as the young population is huge.

Growth potential and current scenario for denim industry:-

World scenario:-

The two big denim producers namely United States and China, have reduced production due to increasing labour and energy costs which has led to increased export demand for Indian denim. However, the country faces high competition in international market with Denim production from neighbouring countries such as, Pakistan, Bangladesh and Indonesia.

According to KG Denim and LNJ data, the total worldwide denim fabric capacity from main 300 manufacturing unit's production will be approx. 7.5 billion yards and is expected to increase to 10.5 billion yards by year 2021. The leading denim fabric production and supply is from China having a capacity of approximately 2-2.5 billion yards per annum. Other major manufacturers are India, Pakistan, Turkey, Bangladesh and Brazil.

Wilson (2011), The Global market of denim products worth an estimated US \$54 billion at retail in 2011, with demand growing steadily at 5-6 %, although growth is flat in mature markets such as the US, Europe as well as Korea and Japan, with the rest of Asia is responsible for much of the increasing demand.

The demand in Asia Pacific region for denim is dominated by India, followed by China. On the global stage India is yet to make its presence felt with brands, products, chains and processes. And Without innovation and R&D it is impossible. Thus Government and industry have to work in partnership for this change. Environmental concerns would keep rising in this century and India should try and position itself in the global frontier as an eco-friendly hub in the entire value chain of the textile and apparel sector. This combined with being seen as labour friendly could become India's USP as it tries to achieve a 20% share of the global trade in the next 10 years.

India Scenario:-

The highly unorganized Indian retail industry in the last few years is having high growth which also leads to denim jeans market also growing due to these developments. The second half of 1990 was a period of rapid growth for denim jeans market in India, due to entry of major international brands like Spykar, Levi, Wrangler, Diesel and Lee in the country.

The Indian denim industry is characterised by periods of excess capacity followed by demand-supply gap narrowed and is cyclical in nature. As the incubation period for denim manufacturing units is less after a period of increased demand, the manufacturer's increases capacity to meet future demand leading to market oversupply. The domestic denim industry has witnessed this twice in the past, first big downturn was between 1998 and 2001 owing to high capacity installation in China, followed by a period of rapid growth in demand in 2002-07. Denim fabric producers cater to increasing demand added increased capacity. However, domestic and export demand for denim fabric in India declined in late 2008, owing to global economic meltdown, which affected manufacturers of denim fabric. With gradual recovery in global economy and reduced cost competitiveness by China, demand for denim fabric picked up by 2011 end, which prompted players to again increase capacity expansion.

The Indian denim fabric industry started using modern equipment with state of art technologies for rope dyeing and slasher dyeing. Indian denim is now available in wide range of 58/60 inch width fabric weight starting from 4.5 oz,

6.5 oz, 8 oz, 11 oz, 13 oz, 14.5 oz. The popular range is 6s, 7s, 10s, 12s, 16s and 21s with yarn spun both on open /ring end spinning system for different denim weight. Weaving technology has also shifted to Air jet looms and popular among them are plain weave 1/1, twills 2/1 and 3/1, broken twills, 4/1, satins and herringbone twills mainly.

The Indian denim fabric industry is currently facing an oversupply situation with overall installed capacity at 1,100 MMPA, while 80-85 percent is average utilisation rates with 850-900 MMPA supply. The total denim fabric demand is estimated 700-750 MMPA, of which 70-75 percent is locally consumed and rest exported. Thus a demand-supply gap of 150-200 MMPA, with many leading players planning to expand, overall capacity is expected to cross 1,200 MMPA in 2015.

Future Potential Of The Sector:-

The Asia-Pacific region denim jeans demand is mainly from countries like India and China. The western dressing style has influenced a lot and is expected to continue resulting in denim wear increased growth in coming years in these countries. Growing demand in both domestic and export markets, is expected to boost the domestic denim fabric industry and the jeans segment is expected to witness steady growth.

Rural demand is also expected to outstrip urban demand as the rural market remains significantly under-penetrated. India's exports are expected to grow more in comparison to the domestic market and are estimated to increase. CRISIL Research expects the market for denim jeans to reach Rs. 114 billion in 2018 from Rs. 89 billion in 2013, implying a five percent CAGR over the period.

Domestic demand trends:-

As per the recent United Nations World Economic Situation and Prospects Report, India will be the fastest growing economy in 2017. At this pace India is likely to become the fifth largest consumer economy by 2025, up from the current 12th position.

In FY16, India's Per Capita Income (PCI) rose by ~7.3% to Rs. 93,231 over FY15. At this rate, the PCI will cross Rs. 1 lakh threshold in FY17. The PCI growth has led to the growth of the Indian middle class making India an attractive market globally. Also, the country's consumer spending is likely to double to USD 2.4 tn by FY19 and can reach ~USD 3.6 tn by 2020. The increasing disposable income will lead to higher affordability of the mid segment fashion apparels leading to increased revenue.

Age group and gender trends:-

India's demographic dividend is expected to be the world's youngest country by 2020 and The main drivers for the growth are the favorable young demographic profile (approximate 50% population of India is in between 15-35 years), movement towards casual comfortable dressing, growth in the women / children segment, rapidly increasing incomes, more organized retail and penetration of brands into smaller towns and cities, the advent of international buying houses, more garment exports and other positive factors.

Denim Product Trends:-

Latest trend in denim fabric is dobby structured peach overdyed with different dark colours. Currently, rich look knitted denim with super stretch and diagonal twill structure is in trend. Fabric construction continues to be heavy with warp weft combinations of OE x OE – Basic Denim, OE x Elasthane, Ring x OE, Ring x Ring, Ring x Elasthane, Crosshatch denims, Slub Denims, Structured (dobby) Denims, Polyester filament weft denims, Poly Stretch fabrics. Multi-count denim fabrics, over-dyed and tinted denims, silky denims, light weight (5 oz to 6.5 oz) denims, doubled yarn warp denims etc.

The international market mainly manufacturers is stretch and non stretch 100 percent multi-ring with super coated/neo colour denim. Colours, structures and patterns are becoming cleaner and subtle. Glossy surfaces are no more existing. Focus is on backing materials and making reverse side of the fabric attractive.

Major brands are asking for unique varieties like khadi denim, tencel/modal/different fibres blend possibly by using T400 Lycra. The latest developments are coated denim. Denim is being made to look like leather, coloured on the inside. These are the Jacquard denims that can be used as jeggings, women wear, shirts, kids wear and also can be used as furnishing fabric. Different structures are in trend which includes knit look and corduroy.

There is a noticeable trend towards more robust, durable with a nice feel of the fabric. Double cloths are making a comeback with a mid-layer material. New generation denims are differentiated with cooling and warming effects also.”

The denim fabric market in India Knit-Indigos is holding an important place in the trends circle. Alongside, more and more stretch ability in the fabrics paired with nice recovery is what the brands are on the constant look-out. various kinds of fancy weaves and dobby's with knit-indigos in New colours blended in indigo keep adding.

Challenges facing the industry:-

India presents numerous advantages as it is among the few countries that have its presence across the textile value-chain from cotton production to garment production. In addition, it has a huge skilled workforce and offers quality products at competitive cost. India's USP to denim manufacturers is undeniably the large raw material base, the skill-expertise and experience availability at various levels of the production and business chain. To remain in the global markets most textile companies have implemented global standards of safety and environment compliance. Though the denim category is among the most promising categories in apparel market of the country, it faces its own set of issue and challenges in terms of scarcity of trained manpower, escalating energy costs, high transportation costs, obsolete labour laws, low level of technology, and lack of economies of scale.

India at present lacks behind in its ability of the product development and Process Development innovation in denim. The market presently is skewed towards denim jeans and the weight (gsm) range of available denim fabric could be broadened to widen denim application. There is very much scope for denim improvement by right processing and value addition through fashion-led processes and finishes.

Establishment of high quality processing and could help to improve the quality and colours, this attracting more to try denim. Only a few innovations like Indigo Wool have come out of Indian mills. The mills in Japan and Turkey are quite ahead of us. There is a need to develop a larger portfolio of denim garments and accessories. The product strategies of how to bring in smart technology into denim could lead to lucrative business opportunities for Denim brand.

Government Initiatives:-

The caution with which various stakeholders of denim eco-system identify and address the issues and challenges associated with the value chain will determine the growth of denim apparel market in the country with best-in-class Manufacturing infrastructure. The Indian government has come up with a number of export promotion policies for the textiles sector. It has also allowed 100 per cent FDI in the Indian textiles sector under the automatic route. Make in India initiative by 2022, the sector revenue may Contribute 25%to the national GDP2ndlargest manufacturer of textiles globally 14%of industrial production 4%of national GDP Employs 45million people 12%share of the country export basket.

To upgrade technology, the government already has a number of policies in

1. Technology Upgrade Fund Scheme for modernization and upgradation of technology in the textile sector by providing credit at reduced rates and Capital subsidies
2. Investments worth over INR 2,500 billion in the industry
3. Scheme for Integrated Textile Parks Providing world class infrastructure to new textile units 57 Textile Parks have been sanctioned Till date, with an investment of INR 60 Billion .
4. By 2017, 25 more Textile Parks are to be sanctioned Integrated Processing Scheme for sanctioning processing parks
5. INR 5 Billion has been allocated besides the above schemes and also provides the industry with support for continuous technological upgrade under the TUF scheme.

The Government of India also allows 100 percent foreign direct investment (FDI) in the textile sector under the automatic route, subject to all applicable regulations and laws, for Make in India for the textile and garment industry programme.

Despite these incentives, India is not a primary outsourcing hub for denim manufacturers. The future of the Indian denim industry lies in product intelligence and investments in greater technological enhancement along with sustainability.

Already several foreign companies have invested in India. These include textile machinery manufacturers Rieter and Trutzschler; and apparel retailers like Zara and Mango (both from Spain), Promod (France), Benetton (Italy), Esprit, Levi's and Forever 21 (all from the US).

Under the Make in India initiative, investment opportunities are available across the entire value chain, value-added specialty fabrics, fabric processing set-ups for all kinds of natural and synthetic textiles, technical textiles, garments, and retail brands.

Discussion:-

India is the 2nd most populated country in the world and Denim has an enormous growth prospects which is only going to increase in the year to come. The most preferred brands of the middle class community are expected to be the designer labels with mid-priced well established brands. Constant increase in the prices of cotton is a matter of concern for the manufacturers and marketers in the market. The manufacturers in the industry are increasingly shifting focus on developing strategies to deal with these price hikes.

Today, a lot of mills in India are experimenting with denim fabric. There has been an innovation with blends produced with Khadi, Wool, Silk, Linen, etc. Certain mills have even innovated to blend and produce polyester denim. Also, experimental innovations are happening with banana fibre, etc.

Creativity is driving the denim fabric market today. The companies have to work towards a collection which is exclusive and can make the company stand out with a difference. From last few years, even fabric development has been following a fast fashion route. The product development is fast and speed of innovation and development grants success to a company.

The market is looking for something new at all times, and blends bring that newness with working on jute, linens etc apart from traditional blends. Indian mills have to drive the market to consumption than oversupply. There is a strong demand for innovative products and in the global and Indian markets mills have a capability to serve it. Affordable denim wear reaches out to multiple segments at various price points. At the same time brands can sustain its leading positions on the denim market by strengthening brand value by taking a fresh experimental approach. Environmental and social awareness in society is on the rise. One emerging manifestation of responsible choice making is the surge in demand for organic denim. Organic denims are eco-friendly range of classic pieces reinterpreted using ethical fabric choices. Organic denim fabric is made with 100 percent organic cotton and free from chemical fertilizers, pesticides and insecticides. The entire production strictly adheres to ecological standards: from spinning, dyeing and finishing. It involves non-toxic fibre processing, colouring agents and fabric treatments which ensures that the production was environmental-friendly. Many manufacturers in India and abroad are offering collections of organic denim.

Conclusion:-

According to Kotler no firm can survive with zero innovation indexes. Any traditional business will struggle if the innovation index is less. Companies nowadays had to integrate their processes with environmental due to increasing environmental concerns. In addition, organizations can generate more business opportunities than their competitors if they can address environmental issues successfully. Indian Denim manufacturers are increasing their awareness about environmental issues as it grows day by day. Especially pioneers of the industry and global companies are paying much more attention to sustainable development and the welfare of the country and the World. As they pay more attention to strategic goals, short term plans and practices are expected to be replaced by long-term projects and investments. The 'greener' industry can be created with uncompromising implication of regulations and sincere approach of managers. Logistics with its key function in competition, offers a new opportunity for companies with reduced costs, creating value for customers and contributing to long term existence of limited resources of the World by doing green logistics activities.

Indian Denim has to evolve parallel to changes in a dynamic marketplace. The Indian denim industry stands to benefit immensely from the ambitious Make in India initiative. The vision of the programme has the potential to change the segment. However, to achieve this vision, India denim manufacturing segment needs to be equipped with facilitating mechanisms. And its effective implementation. If achieved the strength of domestic Indian denim markets as well as its denim export capabilities will remain unparalleled. The future of Indian Denim Industry is in

its product Intelligence. It is a proactive approach of preparing for what is to come, innovation is the key for differentiation and future Positioning. India is in a position to deliver the expectations of the campaign as opportunities are many in this sector. A proper vision is needed with cooperation from government and companies along with sustainability from an environmental, social and economic perspective. Small firms must respond to the environmental challenges facing the world.

They can no longer remain insulated.

Green practices do not always create a burden for industry. Traditional green practices which have reduced waste and improved business results must now be taken to strategic focus. Simple alteration of existing products and improving operational efficiencies must now give way to a leadership focused green strategic approach towards environment. For SMEs, this may need to start with improving the owner's environmental knowledge and awareness. Sustainability of life on this planet rests in the hands of sustainable industries

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