

## Emerging Strategies and Sustainability Challenges in handloom industry of India

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### ABSTRACT

The Handloom sector portray a crucial role in economic development of Indian rural community populous. Handloom being the source of livelihood of several millions of Indian craftsmen and their families. The ancient tradition of hand weaving is kept alive by many artists simultaneously with power looms as the representation of cultural legacy and glorious past of our country. The Handloom has a significant contribution in the growth of GDP in India. This sector employees millions of people directly or indirectly.

This article looks at how Handloom business can tackle the sustainability challenges and protect the environment, analyses the opportunities and explore strategies for its long-term viability. This article sheds light on approaches for preserving and enriching this ancient carpet industry by examining the economic, social and environmental aspects of a successful business model in this field. It also aims to identify sustainable strategies for the Handloom sector. As India exports about 85 to 90%; a major chunk of the total Carpets produced in country and is the largest exporter in the world, Sustainability is a crucial factor in international business to navigate through complex global regulations, consequently sustainability becomes imperative in Handloom industry. It is the prime objective of this study to discuss suitability challenges, Strategies to combat challenges, opportunities in handloom sector, examining a successful sustainable business model like 'Jaipur Rugs'.

**Keywords:** Sustainability, International market, Challenges, Opportunities, Strategies, Growth

### INTRODUCTION

The concept of weaving Carpets and rugs in India was introduced early in 16th century and the 'Made in India' Carpets have a huge demand in the international market. India has a rich heritage of handmade Carpets, which is recognized worldwide with a large share in global exports with the features like eco friendliness, subtle elegance, sustainability, Excellent Designs, superior quality, wide color schemes with a human touch and fine craftsmanship. The handmade Indian Carpet industry is highly labor intensive and it provides employment to more than 20,00,000 craftsmen, especially homemaker women directly or indirectly living in the rural areas, making them financially independent<sup>1</sup>. 'Carpets' are meant to cover the entire room surface, giving a seamless and foundational look to a room whereas 'Rugs' covers only a portion of the floor, movable and temporary, giving a decorative accent to the surroundings.

'Handloom' is interlacing of two different sets of yarns lengthwise as well as widthwise, known as 'Weaving', using a loom made up of bamboo and wood, without using any electricity. A century ago, great leader, Mahatma Gandhi reminded his people about handwoven Khadi fabric and presented it as a weapon for India's independence (Swadeshi movement) and showcased communal harmony through it. These handwoven fabrics

reflect cultural heritage, exclusively customized artwork by talented weavers, depicting rich culture by using motives like Lotus, peacock, parrot, fish, and mango. Handloom fabrics are unmatched and exclusive in terms of comfort, durability, sustainability, which results in a soft breathable, cool, comfortable, absorbent, eco-friendly product. Gandhiji adopted the spinning wheel 'Charkha' as a symbol of the freedom struggle under the British Empire<sup>2</sup>. It may be mentioned that the industry has been accorded the status of national heritage. There are large number of traditional clusters in India, of which almost half deal with textile clothing products using cotton, silk/tussar, wool and jute fabric (Priyatam & Das, 2020).

Currently, India is ranked first in the handmade Carpet and exports in terms of value and volume. India produces a wide range of handmade Carpets of high-quality. Categories of Indian handwoven Carpets include Indo Persian, silk handcrafted, wool, Zeigler, kilim and hand-tufted. India is responsible for around 40% of the worldwide export of handmade Carpets. The Carpet industry in India recorded a growth of 19.5% to reach US \$ 2.23 billion in 2021-2022. Since 2017-2018, Carpet exports from India have achieved a CAGR of 7%. Only in the month of March 2022, the Carpet export of India was US \$ 155 million, which was recorded at US \$ 130.56 million in February 2022, such a strong growth in exports provides a substitute occupation for weavers who belong

<sup>1</sup><https://indiantradeportal.in/vs.jsp?lang=0&id=0,31,24100,24103>

<sup>2</sup><https://handlooms.nic.in/assets/img/EBOOK/Sustainability%20in%20the%20Handloom%20Traditions%20of%20India.pdf>

to financially weaker sections of society, including farmers and other households<sup>3</sup>. The various types of handmade Carpets exported from India are woolen Carpets, durries, druggets, cotton/ silk Carpets etc. accounts for the highest share of exports from country.

Indian Handloom products are geared up for export to several countries worldwide. USA being the topmost importer, followed by UAE and Netherlands. Export data suggests that USA stands at first position as biggest importer consistently from the past more than eight years. Recently, for FY25, USA imported Indian handloom products worth US\$ 139.38 M. whereas UAE stands at US\$ 21.33 M as second largest importer of handloom goods. In total, USA imports from India comprised 28.0% during FY25, UAE constituted 15.3% while Netherlands accounted for 6.3% segment of Indian handloom exports. Other handloom importers from India are France and UK both at 5.6% each while the rest of 39.2% share<sup>4</sup> is by other countries like Sweden, Brazil, Canada, Russia, Denmark, Belgium, Poland, Israel, Canada and South Africa (Refer to Exhibit 1).

### Sustainability in context of Handloom industry

Sustainable materials must have sources which are causing low environmental impact and it can be renewable resources. These materials must be durable with a longer life cycle, must have shorter environmental footprints and must be easier to degrade at the end of their life cycle. For instance, the raw materials used for Handloom manufacture are cotton, silk and wool; which needs to be abundantly protected against pests and insects (Rashid BHT, 2016). The natural fibers are either grown on plant or trees in soil or are made by larva of insects, as these materials have composition that can easily decompose without damaging the environment. The sustainable approach to dyeing of fabric can be achieved by using vegetable/ roots/ stems/ leaves/ bark, or berries etc. Also, the natural dyes can be obtained from animals, fungi or minerals. Even the 'mordant' substance required to bind the dye to textile fiber can be drawn naturally. Some frequently used natural dyes like yellow or grey shade obtained from pomegranate, shades of yellow can be attained by using marigold, red, pink or orange color can be achieved by using madder, green shade can be acquired by employing Mulberry plant and most popular Indigo dye offers blue color, used in India since ages. Several researches are underway to make hand-woven handloom with creative designs to be more attractive to buyer when different eco-friendly mordants are used (Banerjee AN, 2019).

'Sustainability' in perspective of Handloom and textile industry is multifaceted and a prominent word which resonates worldwide. Sustainability has diverse aspects as discussed here. 'Environmental Sustainability' in terms of usage of natural materials, practicing water conservation, using manually operated looms, providing employment to

craftsman and reducing carbon footprints compared to power looms, also, observing 3R's law, and promoting waste reduction. Conventional use of natural dyes is utmost important. Observing every step-in traditional Handloom by portraying ecological wisdom and hence value the environment. The 3R framework: Reduce, Reuse and Recycle; is quite relevant in Handloom sector because of its impact in minimizing waste which sequentially can save our environment from poisonous gases, escaping from dump yards. The framework encourages several eco-friendly practices like the usage of natural dyes, repurposing of old Handloom articles to create new rugs, sustainable and high valued products. The key aspects of 'Reduce' is focus on reducing carbon footprints by using eco-friendly techniques to minimize pollution. 'Reuse' emphasizes on refurbishing the old Handloom products and giving them a new life. 'Recycle' involves the processing of leftover yarn, assorted raw material, clippings and trimmings of Handloom material to deliver a new product. Practicing 3R' in Handloom would result into Economic opportunities (repurposing old material can be a source of new income for artisans) and Cultural preservation (encouraging sustainable Handloom techniques to preserve heritage).

'Economic Sustainability' in Handloom industry comprises of job creation for weavers, strengthening rural economy by hiring more hands for spinning and Dyeing. Last, but not the least 'Social Sustainability' in the field of Handloom industry can be achieved by observing ethical practices by ensuring decent working conditions for artisans, ensuring fair wages, avoiding child labor. Rural livelihood can be sustained, empowering women Artists by providing a source of stable income to poor artisans, who in turn preserves the traditional knowledge of art, keeps ancient weaving skill alive, and uphold cultural heritage<sup>5</sup>.

A self-sustained ecosystem was established among yarn-weavers, dyers, fabric makers, embroidery, craftsman, other artists involved in hand-painting, tailoring and their patrons; which was collapsed due to colonization of India and the impact of high imports of machines into India from 19 century onwards<sup>6</sup>.

### Sustainability Challenges in Handloom industry

As the world is becoming increasingly conscious and being careful about its surroundings, people are concerned for the conservation of planet, Industries must rethink their way of operations. Indian Carpet industry is one of the chief sources of foreign exchange for the country, is recognized around the world for its rich art, culture, and tradition. Though, sustainability is such a concern that Indian Carpet industry must address in order to become more relevant and competitive in the present scenario, around the world. The process of Carpet production involves usage of large amount of water and chemical dies, unethical practices about child labor and gender

<sup>3</sup><https://indiantradeportal.in/vs.jsp?lang=0&id=0,31,24100,24103>

<sup>4</sup> <https://www.ibef.org/exports/handloom-industry-india>

<sup>5</sup><https://sageuniversity.edu.in/blogs/how-handloom-contributes-to-sustainable-fashion>

<sup>6</sup><https://www.savehandloom.org/how-british-rule-broke-indias-textile-industry-and-left-our-weavers-to-die-in-poverty/#:~:text=Before%20colonization%2C%20Indian%20weavers%20weren,demand%20for%20handmade%20Indian%20goods.>

discrimination in Carpet industry, unhealthy working environments, exploitation of human resources and large production of waste material.

Domestic Handloom sector is relatively static and they are unable to introduce any innovation in design and technique, hence lack initiative. The static domestic Handloom sector becomes unable to meet updated Market requirements. Occupational health and safety related issues along with environmental compliance are vital to be noted and acted upon. Also, usage of Azo dyes is harmful to both weavers and customers and are banned nowadays, but several Handloom units are not aware of this fact and they continue to use these dyes. Instead of using azo dyes, vegetable dyes should be promoted but training and awareness in this field is utmost important. Low wages to labor, poor working conditions, excess water usage, pollution caused by handloom processing, production of short-lived products, high material waste during processing are some of other challenges which demand immediate action (Exhibit 2). Air pollution is additionally caused during dyeing and printing of material because of steam generated by coal and water. At the point when the steam is generated, it produces carbon, carbon dioxide, carbon monoxide and sulphur, which again cause air pollution (Mia R, 2019). Natural fibres like cotton, jute, wool, linen, and silk that are used to make handloom fabric are biodegradable. However, one of the main human-related sources of methane is the decomposition of biodegradable materials in landfills, which is a major cause of methane, a significant gaseous substance that damages greenhouses. Similarly, burning waste can release carbon dioxide, and the residual ashes could contain dangerous materials (Alexander TH, 2020).

Sustainable actions taken today would be in the favor of future generations. The sustainable products and the process used in production are in complete harmony with nature, by using minimum resources and practicing recyclability, wherever possible. Each handloom product can be made sustainable. The most widely accepted definition of sustainable advancement is an improvement that tackles contemporary problems without jeopardizing future generations' ability to tackle their own problems (Barooah N, 2015). One such model under study is "Jaipur Rugs". Jaipur rugs is not just a brand, but it's a swaying story, having threads woven through, over 47 years of heritage, perseverance, and people rising from a family business. It has slowly and steadily grown into one of the world most cherished names in the handcrafted carpets. Having deep commitment to human-centric Designs and sustainable impact, this venture connects over 40,000 artisans from rural India to global markets, which is giving a new lease of life to centuries-old tradition of weaving threads together.

### **Carpet and Rug Industry and major players in India**

'Jaipur Rugs' always be quite aware about significance of 'Sustainability Practices'<sup>7</sup>.

"Sustainability is a mindset- an understanding that every choice we make leaves a lasting impact. While the word 'Sustainability' can feel daunting to many, it becomes attainable through subtle shift in perspective. One way I embrace this is by investing in intentionally produced products that I know will stand the test of time and be cherished for generations."

### **Marina Testino, Global Sustainability Ambassador for Jaipur Living.**

Their business is committed to empowering women, ensuring dignity and respect for both people and the planet. They are in making of high-quality handmade Rugs, accessible to their customers, supporting a network of more than 40,000 artisans through their model framework. They empowered women artisans in rural India and enabled them to craft sustainably from within the comfort of their homes where they are surrounded by family, tradition and purpose. They offered an award-winning initiative, named 'Manchaha', which empowers the rural artisan to craft one-of-a-kind rug from the leftover yarn which reduces waste and supports sustainable livelihood of people. They used 100% undyed Wool, which is natural, renewable resource, which requires significantly less amount of water in comparison to the dyed wool, making it eco-friendly, subtle, uniquely reflecting nature's beauty. Also, they used Natural Fibers for preparing rugs, such as Jute and Sisal, which are obtained from renewable resources and are eco-friendly. They had another initiative in which they use PET Yarn which is crafted from recycled materials and plastic waste that might have ended up in landfills or oceans. Such Rugs made from PET yarn are seamlessly blending sustainability, durability, and modern style<sup>8</sup>.

Different product types like woven, needle felt, knotted, tufted; having different material types like Wool, Acrylic, Polyester, Polypropylene, Nylon, Blend of Two or more than two of these materials, based on End-use criteria like Commercial, Residential, Industrial, Sports and Leisure; appropriate products are available in Indian Carpet Industry. India's Carpet Export Market has watched an impressive growth during recent years. A significant Compound Annual Growth Rate CAGR of 20.4% from 2020 to 2025 indicates the vigorous demand for these exclusively designed Carpets<sup>9</sup>. A few leading companies in the Indian Carpet market are as follows:

**Obeetee Private Limited**, which was established in year 1920 in Mirzapur, Uttar Pradesh, India's one of the oldest and most reputed Carpet manufacturing Private Limited, which is popular for its high-end hand-knotted and hand-tufted rugs. Earlier Persian and Chinese motifs were dominating the Carpet industry, but Obeetee is known for turning the India's best artisans to create an indigenous Indian design language. Also, they are 1st to introduce innovation into ancient Carpet in industry by launching MFA (Multi-Fibre Arrangement) textile programme in partnership with Parsons School of Design, New York in which students will gain on-ground experience by working with Obeetee and developing new radical

<sup>7</sup> <https://www.jaipurliving.com/sustainable-rugs>

<sup>8</sup> <https://www.6wresearch.com/industry-report/india-Carpet-market-outlook>

<sup>9</sup> <https://www.6wresearch.com/market-takeaways-view/top-10-Carpet-companies-in-india>

concepts like Carpets that scent the air, Movement-Sensitive LED Carpets, yarn created from animal milk etc.<sup>10</sup>. **Mahajan Carpets** is established in 1969 in Mumbai, Maharashtra, India; caters to luxury hospitality, corporate and residential clients across India and abroad. Respect and integrity are the core philosophies at Mahajan Carpets. They encourage and support local artisans to help them build and grow Sustainable businesses. They believe that their driving Principal is to create quality products. All their production meets the required ethical standards as contended by them. Mahajan Carpets provides employment to over 300 people. Some of those Artist have been a part of this company since its establishment, as claimed on their webpage<sup>11</sup>.

**Yak Carpet Private Limited** established in 1976 in New Delhi is again one of the India's largest exporter of Handmade Rugs and Carpets who offer a broad selection of Kashmiri, Persian and Contemporary designs. They have a whole spectrum of collection of modern Carpets, traditional Carpets as well as transitional Carpets. They ship their products worldwide through their own, reliable logistic partners as affirmed on their homepage<sup>12</sup>. Another prominent competitor is **Shree Sai International** established in year 1994 at Panipat, Haryana, India; manufacturing a wide range of Carpets and floor coverings for export and domestic consumption. The values and ideas are implemented in their products according to women's perception as their thoughts, inspire perfection and purpose. They have exquisite range of Designer Carpets, Braided Rugs, Cotton Rugs, Dhurries, Leather Rugs, And Wool Rugs, especially designed for corporate orders, real estate, restaurants, and hotels as their potential customers in India and abroad. strictly avoids employment of children at every cost. They ensure that every product pass through stringent quality parameters for optimum satisfaction of customers, as retrieved from their homepage<sup>13</sup>. **The Rug Republic** established in year 2004 at Noida, Uttar Pradesh, India; is a global brand offering contemporary and sustainable rugs which are designed by using recycled and eco-friendly materials by skilled Indian Artist. The whole show is run by 'The Sharda Family' friendly work environment that stimulates and encourages innovative ideas to foster growth and value addition. They observe Social Sustainability as every employee is treated with dignity, fairness, and provide them conducive environment for personal growth as well. Their slogan is "Having a great time while striving for excellence"<sup>14</sup>.

### **Jaipur Rugs: Beginning and Journey**

*"My vision is to make Jaipur Rugs a global luxury sustainable brand" Yogesh Chaudhary*

As the Covid-19 pandemic resulted in the complete lockdown across the country, Yogesh Chaudhary, Director

(Sales & Marketing) of Jaipur Rugs, a global leader in rug<sup>15</sup>-making was sitting at his home in Jaipur. It was end of April 2020 and the initial impact of the global lockdown impacted their exports negatively. With time at hand, Yogesh, elder son of the founder of JRG was contemplating about the future direction of their family business. Should they wait for this pandemic to recede and continue to put their faith on exports or was this crisis an opportunity to step-up the game by building aggressively on his recent initiatives like entering domestic market, taking digital route and become a strong consumer brand rather than just exporting. He understood that being a family business, he needed to have a wider discussion within the family but realized that they need to decide quickly, if the company was to realize its ambition of becoming a global brand.

Looking back at the recovery made by Jaipur Rugs after the Covid-19, Yogesh was satisfied with the results as well as the initiatives taken by the company in the last few years. Jaipur Rugs was on course to achieve a revenue of 1,000 Cr. In the year 2023 growing at a rate of more than 30 percent in the last few years. It had embarked on a journey to transform itself by making a strong entry in the digital medium, opening their stores both within and outside India and also started focusing on domestic market. The moot question was whether these new initiatives would put Jaipur Rugs from a mere exporter to a strong luxury brand coming from India?

The journey of Jaipur Rugs started in 1978, when Nand Kishore Chaudhary living in the north Indian state of Rajasthan started Carpet manufacturing with borrowed capital of ₹5000, two looms, and nine workers. Initially, the Carpets were exported through the middlemen. In 1986 they started exporting the Carpets directly after opening an export house named Saraswati Exports along with his younger brother M.K Choudhary. In 1989, they shifted their operations in Pardi, a tribal area in the western Indian state of Gujarat to expand their artisan network by training the tribal people in Carpet weaving.<sup>16</sup> This shift helped them in dealing directly with weavers by eliminating middlemen, in the process boosting the income of weavers as well as the company and significantly reducing the Carpet weaving time, which is typically from 3-9 months.

A fall-out with his brother forced him to relocate to Jaipur in 1999, when he founded 'Jaipur Rugs.' He began with 5000 artisans on board and clocked export revenues of nearly ₹ 5 Crore in the first year!<sup>17</sup> In 2000, he opened an international subsidiary, Jaipur Rugs Inc (later renamed Jaipur Living), in the USA. The company had a warehouse

<sup>10</sup> <https://obeetee.com/Sustainability>

<sup>11</sup> [https://www.mahajanCarpets.com/Our\\_Impact](https://www.mahajanCarpets.com/Our_Impact)

<sup>12</sup> <https://www.yakCarpet.in/>

<sup>13</sup> <https://shreesaiinternational.com/>

<sup>14</sup> <https://www.therugrepublic.in/pages/the-sharda-family>

<sup>15</sup> A woven piece of fabric used for covering a part of the floor.

<sup>16</sup> <https://www.forbesindia.com/article/social-impact-special-2017/jaipur-rugs-nand-kishore-chaudhary-a-rugs-to-riches-story/49135/1>

<sup>17</sup> <https://www.forbesindia.com/article/social-impact-special-2017/jaipur-rugs-nand-kishore-chaudhary-a-rugs-to-riches-story/49135/1>

in Atlanta and handled the distribution of rugs and Carpets in North America<sup>18</sup>.

Carpets and rugs, used to decorate the floors in residential and commercial spaces, were a traditional art of India. The craft originated 2500 years ago around the Caspian Sea and became a part of everyday life over a while.<sup>19</sup> In India, Carpet making came with the Muslim rulers from Central Asia. Carpets and rugs could be categorized into handmade and machine-made. These could be made from various fibers, including wool, silk, hemp, jute, viscose, synthetic fibers, and cotton. These fibers varied in texture, durability, and sustainability. A single handmade Carpet passed through the hands of 90 people who added value to it at the different stages of the process. Manufacturers could use several techniques to weave the Carpets and rugs. The choice of weaving technique impacted the manufacturing time, durability, and shedding of the Carpet. Based on the method used, one could categorize the Carpets as Hand-knotted, Hand-tufted, Handloom, or Flat-weave. Artisans used different types of knots in rug making. The popular among these include the Persian knot, the Tibetan knot, and the Turkish knot. Exhibit-3 shows weaving freedom, self-dependence and revolution in the field of carpet manufacture and export.

The Carpet and rug industry were burgeoning due to growing urbanization, increased income, lifestyle change, and increased spending on furnishing and beautifying their homes. Carpets and rugs were majorly used for decoration purposes rather than for flooring. By the year 2020, the total production of Carpets and rugs in the world stood at US\$ 42.3 billion, out of which knotted and woven Carpets constituted US\$ 23.4 billion<sup>20</sup>. Europe was the largest exporter of Carpets and rugs, exporting goods worth nearly 7 billion US\$ 2020. In Europe, Turkey and Belgium were the biggest exporters of Carpets and rugs, exporting goods worth US\$ 2.19 billion and US\$ 880.2 million, respectively. Asia-Pacific was the second-largest exporting region in the world, with exports worth US\$ 5.73 billion. China and India occupied the leading positions with exports of US\$ 3.35 billion and US\$ 1.6 billion, respectively. The US was the most significant import market for Carpets and rugs. It imported goods worth US\$ 3.14 billion during 2020<sup>21</sup>.

Major exporters of Carpets and Rugs in India included Jaipur Rugs, Cottage Industries Exposition Limited, Obeteetee Private Limited, Uniproducs (India) Limited, Faze Three Limited, Raj Overseas, and Sharda Exports.<sup>22</sup> India exported Carpets to more than 70 countries worldwide. Major importers for the Indian woven Carpets

are the United States, Germany, Canada, the United Kingdom, Australia, South Africa, France, Italy, and Brazil.<sup>23</sup> USA was the largest market for India as the country imported Carpets worth more than US\$ 900 million from India in 2020. The country faced tough competition from Turkey, Istanbul, Russia, China, and Turkmenistan. India currently ranked on top exporting handmade Carpets, both in volume and value. Close to 90% of its handmade Carpets made in India were exported. It was reflected in the business of Jaipur Rugs itself, where 85 percent of the company's revenue comes from the international market.

Jaipur Rugs offered a broad portfolio of products to meet the varied demand of its customers across the globe. It sold rugs made of wool, silk, viscose, jute, hemp, cotton, or a combination of these fibers. The rugs could be hand-knotted, hand-tufted, handloom, flatweave, or shags. To suit the customers' aesthetic sense, it offered rugs in eight different styles: Modern, Traditional, Solids, Naturals, Kilims, Abstract, Geometric, and Distressed. The size varied from small rugs of 2 feet by 3 feet to large Carpets sized 14 feet by 22 feet. It also produced circular rugs sized up to 10 round feet<sup>24</sup>. The company offered seven collections of rugs. These were: Reminiscence, Concoction, Someplace in Time, Unstring (designed by Kavi), Jaipur Wunderkammer, Freedom Manchaha, and Manchaha.<sup>25</sup>.

The company produced the most delicate Indian rugs with unrivalled quality and innovative designs by carefully selecting material, designs, and artisans<sup>26</sup>. It ensured high level of skills in the artisans by investing significant time and effort in their training and skill up-gradation. The company encouraged rural artisans to design their unique rugs under an initiative named 'Manchaha.' The weavers with little or no education competed with professional designers and mega design houses that gave them confidence and recognition. It transformed them economically from wage-earning weavers to designers<sup>27</sup>. The company gained various certifications for these initiatives. These included ISO standard 14001 (effective Environmental Management System), ISO 9001 (Quality Production Standards), and Global Organic Textile Standard certification. Exhibit 4 illustrates India's handloom Export Trends (US\$ millions)<sup>28</sup>.

### **Jaipur Rugs: Increased focus on Sustainability and Growth**

Jaipur Rugs started exporting directly to the international market in 1986. The company identified some partners in global markets who brought orders for handmade Indian

18 <https://www.jaipurrugs.com/in/about/company>

19 <https://sisu.ut.ee/echoing/unit-1-historical-craft/#:~:text=Most%20of%20what%20we%20consider%20craft%20today,harvest%2C%20and%20sweaters%20to%20keep%20them%20warm.>

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<https://ezproxy.imt.edu:2339/portal/statisticsevolution/index>

21 <https://dx.doi.org/10.17336/igusbd.1123954>

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<https://ezproxy.imt.edu:2339/portal/statisticsevolution/index>

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<https://www.texmin.gov.in/static/uploads/2025/12/c865d599cae0e357c02d247a8a82d24e.pdf>

24 <https://www.jaipurrugs.com/in/rugs>

25 <https://www.jaipurrugs.com/in/rugs>

26 <https://decoroutdoor.com/blog/jaipur-rugs-sets-the-stage-for-interior-design/>

27 <https://www.telegraphindia.com/culture/style/jaipur-rugs-on-a-path-to-holistic-success/cid/1813883>

28 <https://startupsuccessstories.in/jaipur-rugs-awarded-with-standard-100-certification-by-oeko-tex/#:~:text=Certification%20by%20OKEO%20TEX%20is,Amit%20Verma>

rugs. The brand gained acceptance due to consistent product quality and service. The company also used public relations effectively to create brand awareness in the international market. Its sustainability and social welfare ideology supplemented its efforts because international customers valued these attributes in a brand. Jaipur Rugs became famous as a socially responsible brand and soon became a prominent name in the global market.

The company's initial customers were B2B customers and retailers in the international market. These customers imported the rugs and later sold these to the end customers. Subsequently, the company started liaising with the international designers and architects who helped them get significant international projects.

With the increasing modernization, the rugs & Carpets market witnessed a growing proportion of machine-made products. These products were cheaper than handmade ones and offered better customization and faster delivery. But Jaipur Rugs did not face any serious competition from these. Its target segment was clearly defined as customers preferring the handmade products' uniqueness, quality, and class. These customers did not emphasize budget while buying Carpets. Jaipur Rugs exports to over 60 countries, including the US, Japan, the Middle East, Germany, South Africa, Brazil, etc.

Social responsibility and empowerment formed the core of the business at Jaipur Rugs, and the company was transparent about it. For Chaudhary, 'profit' and 'social mission' were not diametrically opposite concepts. "I believe a business cannot run without profit and business is all about people," he said. The company's efforts towards social causes received a fresh impetus after creating Jaipur Rugs Foundation in 2004. The foundation aimed to uplift and empower rural artisans by providing employment opportunities. It imparted them weaving skills and providing basic facilities like education, healthcare, and financial inclusion<sup>29</sup>. The foundation operated in 669 villages across Rajasthan, Gujarat, Uttar Pradesh, Bihar, and Jharkhand. It provided education to more than 5000 people and provided door-to-door healthcare facilities to over 67000 people<sup>30</sup>. It also created more than 50,000 job opportunities, thus impacting more than 27 lakh lives in these five states. The foundation helped in skilling weavers in rug-weaving and was engaged in helping the weaver community get access to health care, financial inclusion, and education, among other things.

The organizational culture of Jaipur Rugs was designed on the lines of a family. The company aimed at helping the weavers get the respect and recognition they deserved. It helped and supported them so that they are not discriminated against in society. Women were an underprivileged section of Indian society. The company

actively supported the women artisans by engaging with them. More than 85% of the 40,000 artisans involved in his business were women, and nearly 7000 of them were tribal<sup>31</sup>. It was found that the women added significant value to the business as they were sincerer, more diligent, receptive, and efficient. Consequently, Jaipur Rugs earned tremendous respect for the global community because of the positive impact on people's lives. In 2012, Jaipur Rugs gained membership in the Business Call to Action (BCtA) – a platform that recognized and supported businesses that combined profitability with impact. As its member, Jaipur Rugs was committed to training 10,000 low-income people from rural areas in different states of India on advanced rug weaving techniques by 2015.

Through these initiatives, the company beautifully balanced the business objectives with the social impact. Mr. N K Chaudhary was duly supported by his family in these endeavors. For Chaudhary and his children, the focus now is on how to double the wages of artisans and increase the company's profitability. "The more profit you make, the more social impact you will have," says Yogesh.

### Next Generation Takes Over

While Chaudhary came from a very conservative family, he ensured that all his children including girls got the best education and opportunities. He had three daughters and two sons. The eldest two daughters Asha and Archana after their education were married in US but showed keen interest in the business. Keeping their enthusiasm in mind, Jaipur Rugs Inc. (JRI) was set-up in 1999 with Asha Chaudhary, the eldest daughter of N.K Chaudhary as its President & CEO. The second daughter, Archana Chaudhary who held a degree in Textile Chemistry, joined as its Chief Operating Officer (COO). While Jaipur Rugs since its inception focused on hand-knotted Carpets but Asha consistently advocated entry into tufted Carpets as US market was strongly inclined towards this category. This led to their entry into tufted segment in 2007, which helped them develop a strong foothold in US market and increased their overall revenues. The Atlanta (Georgia) company warehouse became the hub for rugs and Carpets to the North American market. Over time, US became their biggest export market, which accounted for 60 percent of its ₹133.49 crore revenue in fiscal 2017. Even during this ongoing pandemic when the revenues from exports took a hit, Jaipur Rugs reported a 20 percent increase in demand from US Market.

The third daughter, Kavita Chaudhary, entered the business in 2004. She headed the design and development department and looked into the design, textiles, and colors. She focused on collaborating with the leading designers to create unique products and collections for their customers. The company collaborated with internationally acclaimed designers to create unique and

29 [https://www.businesscalltoaction.org/news/jaipur-rugs-boosting-rural-indias-economy-by-creating-a-new-generation-of-artisans#:~:text=Jaipur%20Rugs%20Foundation%20\(JRF\)%20was,or%20any%20other%20rug%20company.](https://www.businesscalltoaction.org/news/jaipur-rugs-boosting-rural-indias-economy-by-creating-a-new-generation-of-artisans#:~:text=Jaipur%20Rugs%20Foundation%20(JRF)%20was,or%20any%20other%20rug%20company.)

30 <https://give.do/discover/EY3/jaipur-rugs-foundation/#:~:text=Jaipur%20Rugs%20Foundation%20has%20>  
*Advances in Consumer Research*

0positively,education%20to%205%2C301%20rural%20individ uals.

31 <https://www.businessofhandmade.com/jaipur-rugs#:~:text=Reviving%20the%202%2C500%2Dyear%2Dold,women%20and%207%2C000%20are%20tribals.&text=Shanti%20Devi%20was%20married%20off,her%20work%20makes%20her%20happy.>

innovative designs and launched a designer range of rugs. Some designers included Kavi, Shantanu Garg, Matteo Cibic, Tania & Sandeep Khosla, and Gauri Khan. In 2019, Jaipur Living Inc appointed Steven Sorrow, a respected and sought-after designer, as their Director of Product Development in Atlanta<sup>32</sup>.

Yogesh Chaudhary, the eldest son, joined Jaipur Rugs 2006 after leaving his studies at Babson College, US mid-way due to some unexpected events back home in India. He brought with him the energy and dynamism that transformed the company from a B2B entity to a modern-day digital brand. At the time of his joining, Jaipur Rugs was exporting whatever was produced, and the US market, handled by his sisters Asha and Archana, contributed to nearly 90% of the company sales<sup>33</sup>. While the focus on exports so far had paid rich dividends and initiatives like entry into tufted rugs segment had resulted in opening new markets like US and increased their revenues. This resulted in company growing at a healthy rate of more than 10 percent on an annual basis.

Yogesh looked after sales, branding, and operations and directed the head office and the field teams. Due to changing socio-economic and technological landscape, he sensed a much bigger opportunity for Jaipur Rugs and launched many new initiatives from 2015 onwards like entering into domestic market, launching their stores both within and outside India as well as starting their E-Commerce wing. Nitesh Chaudhary joined the company in 2018 and managed the supply chain and innovation of Jaipur Rugs Living. Mr. Chaudhary held the position of Chairman and Managing Director of the company<sup>34</sup>. It is also claimed that collaboration provides a guarantee regarding the exchange of facts between supply chain partners and in turn handles uncertainties (Gunasekaran A., 2015) and consequently enables communication among the stakeholders.

The prime strategy to sail through tough times is the entry into US market led Asha and Archana through Tufted Carpets had paid rich dividends and contributed handsomely to Jaipur Rugs kitty. Yogesh always felt that there was far bigger potential and opportunities available for Jaipur Rugs beyond exports, where they were growing at a steady pace. He was convinced that the company had intrinsic strength to become a strong brand rather than a mere B2B player focusing only on exports and believed that even the domestic market was ready for Carpets and rugs. He started initiating a lot of measures since 2015-16 onwards to transform the company and take it to the next level. For this purpose, he expanded his team and brought talent from different parts of the country not just locally. Some of the new initiatives launched were;

### **Building a Sustainable Brand Identity**

The other aspect of developing a strong brand identity and visibility was to develop retail outlets within India as well

as abroad. The physical stores played an important role in the company's strategy to capture the B2C market. In addition to selling the products, these stores brought the brand closer to the B2C consumers and helped immensely in brand building. The website organized content under six primary tabs: Shop, Stories, Manchaha, Sustainability, Custom, and Designers. The Stories tab presented the legacy and values of the brand by highlighting the founder (N K Chaudhary), the city (Jaipur), the company (Jaipur Rugs), the craft (Carpet-making), and the designers (people who designed the Carpets). The website provided ample opportunities and freedom to the company for branding, storytelling, and marketing.

Jaipur Rugs always considered that since the stakes are high, sustainable brands need to show authenticity by making promises to act and expand in ways that benefit society at large. This means that business procedures and practices must be in line with the company's strategy and vision. Results must be verifiable and consistent with the positioning of the brands. The brand may suffer significant harm from dishonest communications and strategic choices that compromise the initial commitments. Sustainable brands must make reasonable promises to enhance society and the environment. Objectives should be specific, attainable, verifiable, and consistent with the company's core competencies and brand identity. Setting unattainable objectives can make it harder to fulfil brand commitments, compromise authenticity, and miss out on a chance to position your brand. The three ESG (Environmental, Social and Governance) pillars offer a practical framework for establishing goals, carrying out projects, and tracking advancement. They make it possible for businesses to think about how sustainability goals can complement their main operations and link procedures like executive incentives to reaching objectives. A thorough examination of the company's internal operations, including supply chains, employee satisfaction, and corporate culture, is necessary to develop a sustainable brand. The first step in the internal change process is to audit current procedures to find areas where business practices already incorporate sustainability and areas that could use improvement. This procedure offers the foundation for creating a long-lasting brand. A compelling vision that inspires and motivates management and staff is the first step in any brand building process. They will represent the company's brand to external stakeholders and act as change agents within the organization.

One important distinction is that a sustainable brand has a larger goal: to draw in clients, investors, and artisans while making a long-lasting difference in society and the environment<sup>35</sup>. Integrating sustainability into regular operations and informing stakeholders of developments and successes calls for a sustained effort. Putting a green label on a product is only one aspect of sustainable branding. It delves further into the essence of your brand

32 <https://www.jaipurliving.com/press-releases/jaipur-living-taps-steven-sorrow-as-director-of-product-development>

33 <https://businessindia.co/magazine/corporate-report/jaipur-rugs-sets-a-precedent#:~:text=He%20is%20often%20referred%20to,says%20Prabalad%20in%20his%20book>

34 <https://www.nkchaudhary.com/about/#:~:text=Meet%20The%20Family,Babson%20College%2C%20Boston%2C%20USA>

35 <https://longtimelabel.com/en/understanding-what-a-sustainable-brand-is/#:~:text=A%20sustainable%2C%20ethical%20or%20fair,from%20destructive%20climate%20change.>

and the motivations behind your actions. Sustainable branding is all about combining actions and values, from strategy to purpose. The goal is to develop a brand that is both sustainable and perceived as such. This is rather a type of dishonest marketing that basically promotes sustainability in spite of the absence of supporting practices. It is one thing to present your business as sustainable, but it is quite another to implement sustainable strategies and practices. At Jaipur Rugs; they are honestly doing and are willing to do so.

### **Focus on Domestic Market with International footprints and growing focus on Sustainable practices**

Jaipur Rugs became India's first handmade Carpet manufacturer to get the prestigious "SA 8000" certification for working with more than 40000 people from the country's underprivileged communities in the remote areas. It won the prestigious 'America's Magnificent Carpet Award' in 2003. In 2010, Mr N K Chaudhary was given the Ernst & Young 'Entrepreneur of the year' award. In 2013 Jaipur Rugs made it to the cover page of Outlook Business, one of India's leading business magazines. In 2016, they got the Emory University 'The Emory Entrepreneur Award' and in 2017 got the Americas Mart Award in the Best Floor category and were winners of the Carpet Design Award for the best modern category. In 2018, it won two German design awards and European product design award. In 2019, they were the winners of European Product Design Award and IDA design award for home interiors. In Domotex's 2020 Carpet Design Awards, the company won awards in three categories: Best Collection, Best Modern Design Deluxe, and Best Modern Design Superior<sup>36</sup>. Jaipur Rugs was a pioneer in realizing the emerging concerns for sustainability and waste management in the market. It used recycled yarn in rug manufacturing and switched to low-impact, eco-friendly dyes without compromising the quality of yarn and durability of the dyes. Excess Waste production indicates inefficient processing (Pongrácz E., 2009) which eventually results in wastage of funds at both stages: first when raw materials are purchased followed the time when waste materials are to be discarded.

For a considerable period, Jaipur Rugs focused solely on international markets as they felt that there would be a limited market for Carpets because the products were expensive. However, a chance visit to some Carpet stores in Bangalore changed Yogesh's perception of the domestic market. Visiting these stores as customers he realized that stores were over-charging and most of them did not understand the product. In 2016, Yogesh started focusing on the domestic market by opening retail showrooms in India. The first store was opened in Jaipur in 2016 and based on good response received from customers, they expanded it to 6 stores with plans to open more. Since their product range was expensive with the

starting price point of around Rs. 25,000 to going as high as Rs. 25-30 lakhs targeting high net-worth individuals, professionals and business owners. Within a short span of five years by 2020-21, the domestic sales contributed seven percent of their total revenues. The company intend to expand its consumer base in metro cities as well as tier-II cities of India and aggressive plans to reach out to customers within India. These initiatives were expected to increase the contribution of domestic sales to 12-15 percent in near future<sup>37</sup>.

As part of their strategy to become a strong consumer brand and enter domestic market, the company started setting-up their retail stores aggressively. The first store came up in 2016 in Jaipur in the company office followed by a store in Delhi. Soon more stores were set-up and by December 2019, the company had retail two stores in Jaipur, and one store each in Delhi, Mumbai, and Bangalore. In addition to this, the company also started setting-up stores outside India, one store in Milan (Italy), one store in Samara (Russia) and two stores in China. Going forward the company planned to open more stores in India and abroad. Within India, the company intended to expand its store network in Eastern and Southern India. Internationally, the stores were planned in London, Singapore and UAE. Exhibit 5 depicts Handlooms Export Revenue Share Category-wise (FY25).

A typical Jaipur Rugs store would be roughly 3000-4000 square feet in size and would display 200-300 Carpets. Each store was manned by a team of 8-10 employees<sup>38</sup>. These employees acted as the link between the customers and the interior designers, and ensured that the customer requirements were adequately matched. In addition to selling the products on display in each store, the international stores were meant to act as spokes of the India hub that stored the entire range. The customers could walk in, examine all the products digitally, and place an order digitally. The India office will despatch the product to the international stores and it will be delivered to the customer. This way the international stores also doubled up as fulfilment centers for E-commerce.

Yogesh Chaudhary was a technology enthusiast and started introducing various technology led initiatives within the company. It was one of the first companies in this business to implement ERP systems and uses computer-aided design (CAD) for designing and printing. He understood the significance of E-commerce and was determined to traverse this path. In 2016, Yogesh hand-picked Pratik and created a full tech team for taking the company digital. The team developed a fully-functional E-commerce website in 2017 [jaipur rugs.com](http://jaipur rugs.com), which provided a platform for safe and easy transactions to the customer. Customers could also get their products customized by sharing their specific requirements with the company. They used the website to improve the

36<https://www.hometextilestoday.com/manufacturers/jaipur-living-nabs-three-2020-Carpet-design-awards/#:~:text=Jaipur%20Rugs%20won%20in%20the,company%20takes%20home%20three%20awards>.

37<https://www.thehindubusinessline.com/companies/jaipur-rugs-aims-to-be-1000-crore-firm-next-fiscal/article65089819.ece>

38 <https://www.scribd.com/document/514296952/LIME-8-case-Study-Jaipur-Rugs#:~:text=Empowerment%20&%20Global%20Reach,Jaipur%20Rugs%20was%20founded%20in%201978%20and%20has%20since%20trained,e%2Dcommerce%20and%20store%20sales>.

customers' product knowledge to buy the perfect rug for their space. For this, it added the 'Know Your Rug' feature that helped customers learn about the process and technicalities of a rug-making simply and quickly. The Carpet designers could also log in to the website and use some specific features to curate the rugs of their choice. 'Tana Bana' is an in-house, technology driven app, which is an award-winning Special Mention Award at the mBillionth-South Asia Awards) work by Jaipur Rugs in 2018; with an objective to empower rural artisans. During the weaving process, two threads: Tana refers to warp (lengthwise thread) while Bana refers to the weft (widthwise threads)<sup>39</sup>. The app connects, supports and aids in tracking the creation of their own handcrafted rugs. It directly connects rural artisans to design and production progression, consequently bringing the gap between weaver and customer.

In addition to the company's website, the products were also available on third-party e-commerce platforms like Amazon, Myntra, and Pepperfry. The third-party platforms remained a minor contributor to the company's sales because these did not highlight 'Rugs' as a main category in their portfolio. Though the platforms contributed less than 25 percent (nearly 20%) of the online business, these helped increase the brand's visibility and presence in the digital world. Currently, the customers visited physical stores and bought online as well. The customer journey for a single purchase, from consideration to conversion, was spread over nearly one month. During this one month, the customers visited different stores and made several queries online. The company expected that its digital interventions, and wider adoption of technology would modify the customer journey. The company expected that in the next five years the journey would start with the customer visiting the company website, and short-listing a few rugs. It would be followed by a visit to the nearby store to touch and feel the product. They need not decide during those personal visits to the physical store. It would be followed by the marketing team approaching the customers online and asking about their decision. Once the customer agrees, the payment would be received online and the nearby store would deliver the product at the customer's home. These also played an important role in the company's Omnichannel strategy wherein these stores complemented the digital marketplace and made the customer journey seamless.

### Present Status & going ahead

From sourcing wool to reaching the stage of exporting the product, Jaipur Rugs uses an all-inclusive business model. The business model purchases wool from several nations, including India, and has it handwoven by craftspeople in and around Bikaner, Rajasthan. The company pays its weavers a monthly fee after the wool has been dyed. The company charges retailers and wholesalers between \$2 and \$40 per square foot. Today, 6,000 looms in the states of Rajasthan, Gujarat, Uttar Pradesh, Bihar, and Jharkhand are run by Jaipur Rugs' 40,000 weavers, the

majority of whom are women. Yogesh himself emphasizes that foreign markets account for 85% of the company's revenue.

All this was done with the help of a tech team comprising of 20-25 people, supported by a marketing team of 12-15 people. It was a good number compared with the total number of employees in the company that stood at around 250-300. These new initiatives launched in the last few years yielded good results. E-commerce contributed 70% of all domestic revenues and 30% of all international revenues. The company expected this contribution to change to 30% for domestic and 70% for international in the next five years. Looking at customer segments, E-commerce was already contributing significantly to B2B revenues (data needed) but contributed only 20-25% of the revenues in B2C segment. In the next five years, the company intended to increase the E-commerce contribution in B2C revenues to 30-40%.

The onset of Covid-19 at the end of 2019 changed everything and their exports took a severe hit because of restrictions imposed on the cross-border movement of people and goods. The business experienced a hit on the demand side as the demand slowed down considerably. The business did not face much disruption on the production side because most of the weavers and artisans were working remotely since the beginning. The company used online and digital media to connect to the customers and get as many orders as possible. The company also introduced virtual assistance and virtual rug displays to buy a rug online with ease and comfort. Yogesh was wondering whether he should wait for the pandemic to pass or bet big and use this crisis to strongly take forward his recent initiatives to put Jaipur Rugs in a different growth orbit. He realized that he needed to take his family along and make them buy his vision if they want to become a global brand and achieve a revenue of 1000 Cr.

The government policies always promote and encourages the Handloom sector by floating schemes and financial assistance in favor of Handloom weavers and ancillary workers. Yet this sector has prolonged scaring challenges, a few challenges like poverty and illiteracy among Weaver families, poor approach to basic necessities, including clean drinking water, health, and housing facilities, rise in prices of cotton and silk yarn, which is major raw material for Handloom weaving, majority of weavers are independent workers bearing the risk of raw material procurement, marketing and sales. For the holistic growth of wool sector, Ministry of Textile, India has taken an initiative of Integrated World Development Program IWDP, which has focused on branding of Pashmina and carpet grade wool. The government organisation Carpet Export Promotion Council CEPC is also an initiative in this direction by government of India. Other government organisation which works towards training of Artist is Indian Institute of car technology situated in Bhadohi, Uttar Pradesh, India. The key objectives of Institute are nurturing trained, skilled professionals for the carpet and textile industry through

39 <https://www.entrepreneur.com/en-in/leadership/weaving-a-legacy/457006#:~:text=Weaving%20a%20Legacy%20N%20K%20Chaudhary,presence%20in%20over%2085%20countries.>

various Academic programmes, fostering, innovation and new designs in carpet and textile products by conducting research and development to advance the car technology and provide crucial technical assistance as well as testing facilities to the industry. CEPC is a government initiative which aims to boost India's handmade carpet exports by promoting the carpet industry globally, supporting Artist, facilitating market access to artesian Sand, helping exporters with government policies, research and development and skill development acting as a vital bridge between Indian exporters and International buyers. Several initiatives are undertaken by government to provide training to a large segment of unskilled labour working in this sector, in order to address the challenges of local units (Varghese A., 2015).

IWDP works with an objective of making India globally, competitive producer of high-quality wool and products by bridging gap from raw material to finish goods. They support the Pashmina pool production in Ladakh, India, takes initiative to upgrade labs and promote innovative applications of wool, development, 'Indian Wool Mark' to certify quality, modernising Pre-loom (scouring, carding) and Post-loom (Dyeing and weaving) processes. The unique handloom industry is a rural industry with markets all over the world. The Government of India does not impose any taxes on the industry due to the large number of people it employs. People who work in this field are not burdened to file income tax returns or obtain a permit before establishing this business. Moreover, since all goods are produced on manually operated looms, there is no technological superiority among master weavers (Bhagavatula, 2010).

### Conclusion

The splendor of India's Handloom suggests a perfect harmony of tradition and sustainability. India's Handloom industry rooted by ancient practices has evolved as an illustration of eco-friendliness and minimal dependence on fossil fuels. In recent times when the market is dominated by articles acquired by mass production, offering lower per-unit cost and rapid production speeds, the Handloom has carved an exceptional reputation for itself. Despite of challenges like rising raw material cost, shortage of proficient artisans, inconsistent income of weavers, supply chain and marketing issues in the path of successful Handloom ventures, this sector still holds prominence in terms of artistry and heritage, innovation and adaptation, global demand of exclusive items.

Since handloom weaving is a localized process by nature, thus there is least need for extensive transportation. The carbon emissions from long-distance transportation are reduced by the raw materials being frequently obtained from neighboring areas. Additionally, this localized approach maintains traditional agricultural practices and helps local economies remain sustainable. The players like Jaipur Rugs, by using their designing abilities to improve society and the environment, had taken the lead in the sustainability movement. This link between

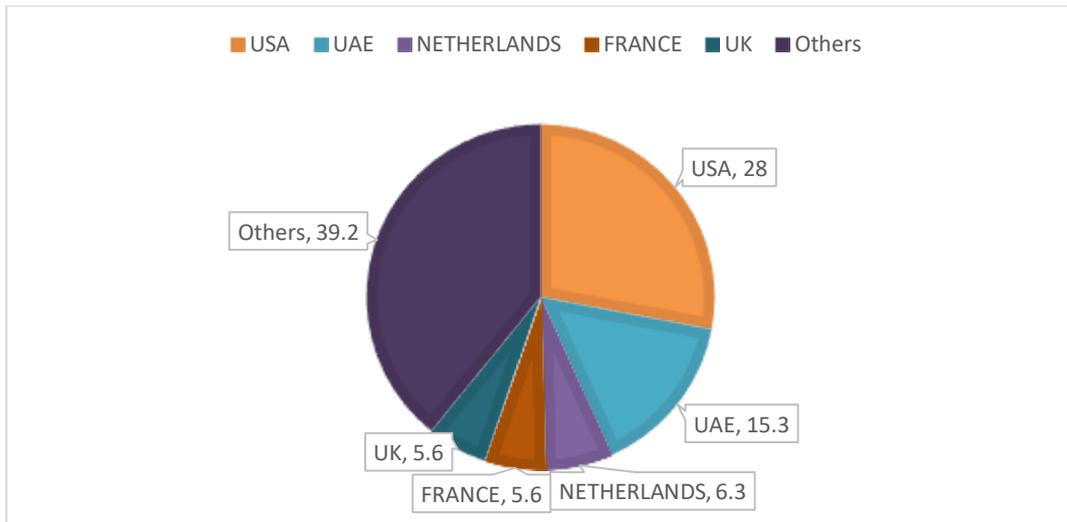
sustainability and craftsmanship is consistent with the handloom industry, by observing the need for environmentally friendly practices. Handloom goods' longevity and robustness lessen the waste production in this industry which is again a significant environmental issue.

Despite numerous challenges, such as high production costs to improve product quality, handloom weavers continue to do this work on a hereditary basis. The study also reveals that the government provides very little financial support. The government must act immediately to ensure the survival of these handloom weavers. As a result, there is a decrease in the production of handloom products, which are still popular in the market today but whose high cost deters buyers. However, these handwoven products are of better quality than power loom products. The handloom sector will also strengthen the country's economy and generate a large number of jobs.

The advantages and disadvantages of the handloom industry's environmental sustainability were covered in this article. Achieving sustainability in the handloom industry is the primary goal. The production of handlooms requires extensive mechanical and chemical processing, which uses a lot of energy, chemicals, and dyes. In order to reduce pollution, natural dyes should be frequently chosen over synthetic ones. Compared to synthetic dyes, natural dyes are more environmentally friendly and have several benefits, especially when it comes to improving and keeping oneself healthy. These dyes have therapeutic and natural healing qualities. In addition to causing allergies in people, synthetic dyes have a number of carcinogenic qualities. However, natural dyes don't pose any health risks because they come from renewable resources like plants, animals, minerals, and microorganisms. They are non-toxic and biodegradable. Furthermore, some of the natural dyes have beneficial antioxidant and therapeutic qualities. They are therefore frequently utilized in the food, textile, and cosmetic industries (Pandit P, 2020). Additionally, the majority of the energy used comes from thermal power plants, which produces a lot of greenhouse gases that have a detrimental effect on the surroundings. Instead, it is best to use renewable energy sources like solar and wind power, which will lower power costs and cut down on carbon emissions and greenhouse gas production. Additionally, handloom spinning produces a lot of solid waste, including dust and lint, as well as air and noise pollution.

Due to rising labour costs, climbing raw material costs, and growing sustainability-driven global fashion sectors, handloom industries are facing a number of difficulties. The handloom industry in India and other developing nations can become more sustainable by implementing many of the strategies discussed in this article. The industry should achieve 'Zero waste' target. Regrettably, zero waste—possibly a preventive strategy—is frequently misunderstood as an unattainable goal given the current state of the economy. (Greyson J., 2007).

**Exhibit-1: Country-wise Handloom Exports share (FY25 data)**



Source: <https://www.ibef.org/exports/handloomindustry-india>

**Exhibit-2**

Sustainability Challenges	Strategies to combat challenges	Opportunities in market	Jaipur Rugs contest
High cost of raw material	Strategic sourcing of sustainable materials	Online retail segment sale alongside offline supply chain	emphasizes waste reduction, direct sourcing, and local innovation
Additional cost burden on manufacturer	Focus on cost-effective manufacturing processes	Significant opportunity for market expansion	Low-cost rug solutions with favourable aesthetics
Product's Supply chain disruption	Explore e-commerce or direct to customer sale channels	Growing demand for smart and sustainable flooring	a highly resilient, decentralized, and tech-enabled supply chain
Market saturation in carpet industry	Introduce energy-efficient and environment friendly features	Call for Customized and modular flooring solutions	<b>Luxury Positioning &amp; Global Reach</b>

Source: Developed by Author

**Exhibit-3: Weaving freedom, self-dependence and revolution in the field of carpet manufacture and export**

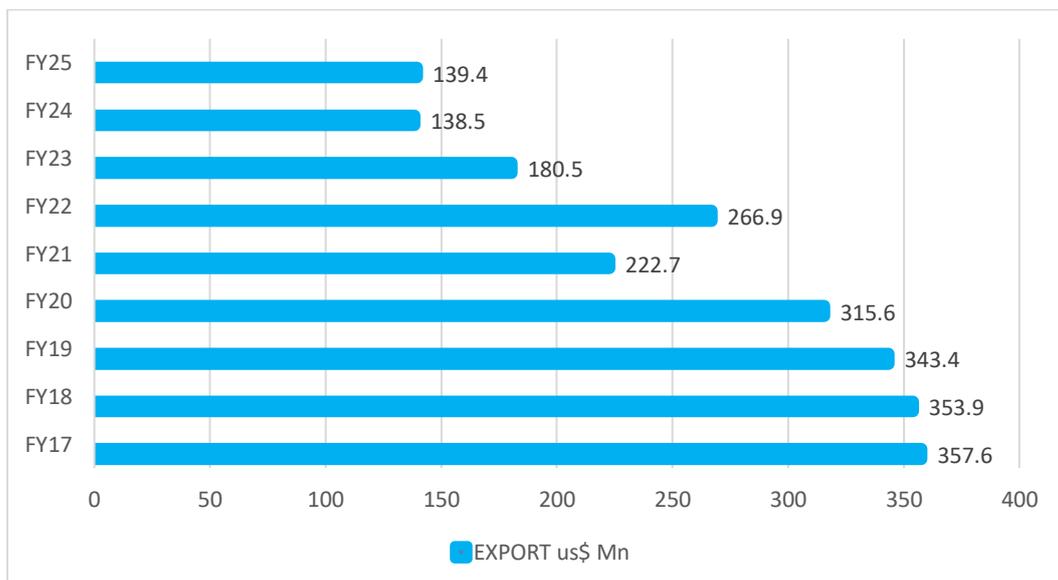


Source: <https://www.financialexpress.com/life/lifestyle-weaving-freedom-transformation-and-self-dependence-one-carpet-at-a-time-the-story-of-jaipur-rugs-2663124/>

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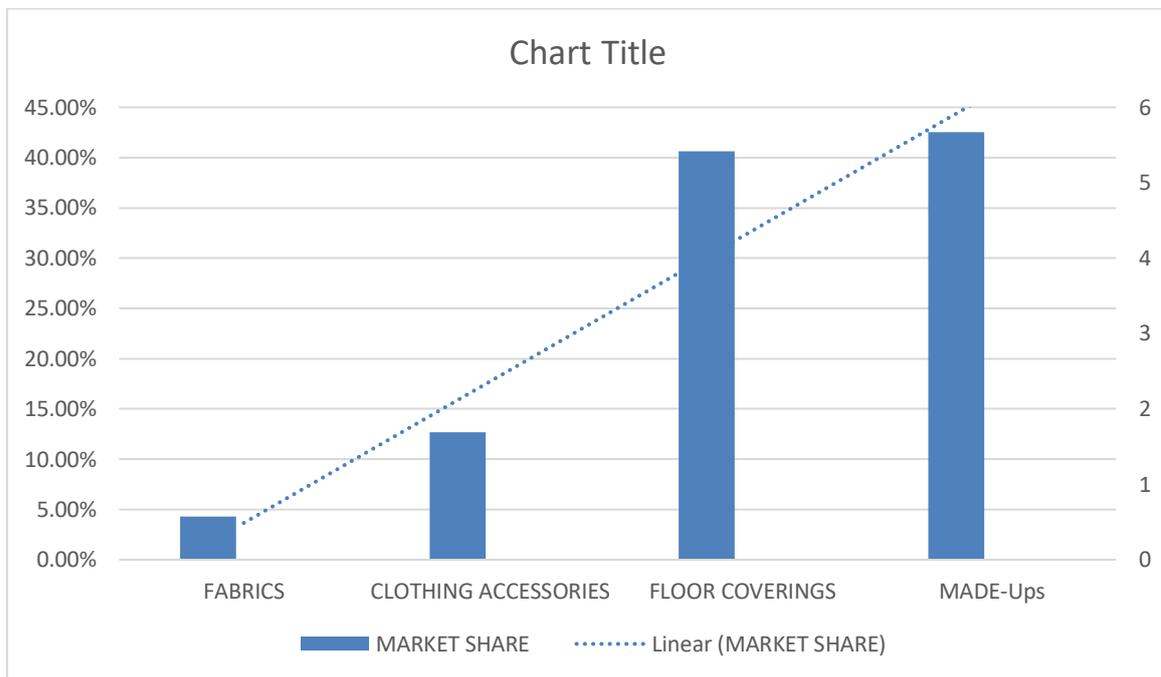
Source: <https://www.financialexpress.com/life/lifestyle-weaving-freedom-transformation-and-self-dependence-one-carpet-at-a-time-the-story-of-jaipur-rugs-2663124/>

**Exhibit 4: India's handloom Export Trend (US\$ millions)**



Source: <https://www.ibef.org/exports/handloom-industry-india>

**Exhibit 5:** Handlooms Export Revenue Share Category-wise (FY25)



Source: <https://www.ibef.org/exports/handloom-industry-india>

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