

Sustainability efforts of denim brands Mud Jeans and Levi Strauss & Co.

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Introduction

The textile and apparel production processes make use of scarce resources (such as land, water, electricity) and many chemicals creating products with high environmental impact (De Brito, Carbone & Munier, 2008). According to Whelan and Fink (2016), social and environmental risks can disrupt businesses and even affect their sustenance. The social and environmental factors that disrupt a business' performance are often multidimensional in nature. Although, efforts by brands often center on environmental sustainability because it is easier to make a business case in favor of these efforts. While an effort made to improve environmental sustainability permits one to measure the outcomes in a relatively straightforward way, assessing the social impacts of efforts undertaken by a brand to be improve on their socially responsible practices are neither easy nor straightforward.

The sheer number of chemicals used in the textile and apparel supply chain presents obvious opportunities for companies to reduce use of toxic chemicals and materials to improve their environmental sustainability quotient. As opposed to the social sustainability measures that focus on improving the lives of people impacted by the brand's practices that impact various stakeholders along its supply chain.

Purpose of study

The purpose of this study is to investigate the efforts made by two denim brands – Levi Strauss & Co. (U.S.A) and Mud Jeans (Netherlands) to assess their sustainable practices and present the findings. Since both Mud and Levis have similar products, it enables a comparative study of each brand's production process and differences in the sustainability approach adopted by each brand, their mission, their sustainability goals and objectives, their present agenda on sustainability.

Levis' current sustainability goals are to accomplish zero discharge of hazardous chemical by 2020 and to produce more than 80 % of its product volume in Worker Wellbeing factories by 2025 (Sustainable Businesses, 2016). However, Mud Jeans is known for their efforts to adopt circular model in the category of denim products (Mud Jeans, 2018). The brand is known for its efforts to recycle denim product that is known for its use of cotton, large quantities of water and chemical intensive processes to finish the product, and large quantities of water and energy when being used by consumers.

Findings

Environmental sustainability efforts being taken by brands include the reduction of toxic chemicals throughout the production process which may negatively alter the environment and people who encounter these fashion goods. Fiber sourcing (natural, synthetic or regenerated) has an inevitable impact on the

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environment. The dyeing processes are often chemically intensive processes, used to color the product. Product finishing can involve use of chemicals that could be toxic to the wearer, the people involved in finishing the product, people assembling and handling the end product. Refurbishing and care of product during use is also an energy intensive process. Following table demonstrates the difference in approach to sustainability of both the brands.

Table 1: Comparing Levi's and Mud sustainable process and procedures.

	Levi's	Mud
Chemicals in Production	<p>Developed the Screened Chemistry Program. This evaluates chemical formulations against human and environmental health hazard endpoints before they enter the supply chain</p> <p>Adopts the most stringent law related to restricted chemicals in country of production.</p>	<p>No synthetic pesticides due to organic and regenerative cotton use.</p> <p>No chemicals used in finishing process.</p> <p>Cradle-to-Cradle certified dye formulations used which are not harmful to humans or the environment.</p>
Fiber Sourcing	<p>BCI cotton used in some of production</p> <p>By 2020 Levi's strives to use 95% BCI cotton.</p>	<p>Post- consumer recycled denim and virgin organic cotton used exclusively</p> <p>Global Organic Textile Standard (GOTS) approved cotton. This ensures all chemical inputs have met certain environmental and toxicological criteria, a functional wastewater treatment plant was mandatory for any wet-processing, and a quality assurance system was followed.</p>
Dyeing	<p>Abides by Global Effluent requirements (GER) standards for wastewater to mitigate water toxicity from fabric dyeing. This ensures that discharge water is only released if it has contaminant levels that are acceptable according to local or GER standards, whichever is more stringent.</p>	<p>Water recycling and reuse throughout dyeing and washing.</p> <p>Indigo from Dyestar is Cradle to Cradle (C2C) certified</p> <p>C2C ensures it can safely be re-used and repossessed in new products,</p> <p>Reserve & Clean Flow is the Indigo Flow dyeing technique that results in up</p>

	Water recycling and reuse throughout dyeing	to 70% water and energy savings and much cleaner wastewater.
Finishing	<p>Water<Less™ finishing. Starts at design level to devise how to reduce the amount of water used in the finishing process. For example, remove water from stone finishing or combine multiple wet cycle processes.</p> <p>Levi's aims to make 80% of their products using Water<Less™ techniques by 2020. Presently, Laser finishing used on a small scale.</p>	<p>Laser finishing utilized on all products. This eliminates the need for harsh finishing chemicals.</p> <p>Ozone finishing on all jeans, this reduces the rinsing requirements from seven rinses to three. This reduces energy consumption because less water must be heated for wet finishing.</p>
Social Sustainability	<p>Developed the Worker Wellbeing Program</p> <p>Levi's surveys factory workers to hear firsthand what they need to become more engaged, healthy, and productive employees in order to implement accurate programs. Partners with the ILO to implement their Better Work Program.</p>	<p>Mud Jeans is Max Hevelaar certified. Max Havelaar is the Dutch member of FLO International, which unites 23 Fairtrade certification producer and labelling initiatives across Europe.</p> <p>Fair Wear Foundation partnership, whereby the two parties work to correctly assess and improve the standards of their partner factory.</p>
Refurbishment	<p>Levi's has engaged in consumer education to prolong life and reduce impact of care. The company advises consumers to wash jeans only rarely, spot clean, and air dry.</p> <p>Tailor shop offered in select stores to make small repairs to their jeans.</p>	<p>"Lease a Jeans" Program. customers commit to leasing the jeans for one year. Once the year is up, Mud takes the jeans back and shreds and rethreads them into new jeans</p> <p>Raw materials cycle through a circular process of production, wear, and material creation in a closed loop. This reduces the impact of production by recycling raw materials and omitting the need for water and pesticide intensive cotton farming</p>

Conclusion

Larger sized brands such as Levi's struggle to implement practices fully, and their impacts are much greater than small brands in comparison. Mud demonstrated that smaller brands are able to micro manage each part of their supply chain and make changes quickly. Consumer education regarding garment care plays a large role in extending sustainability efforts past the purchase of denim products. The two brand's revolutionary practices and efforts have influenced brands and consumers to gradually adopt more sustainable practices in order to be kinder to the planet and the humans who contribute to the denim industry

References

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