Sustainability Analysis of Indian Fashion Designer Firms (IFD)

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VIEW POSTER

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Abstract

The Indian apparel sector is a preeminent sector for employment generation, trade, revenue, and investment (Raj, Ma, Gam, & Banning, 2017). According to India Brand Equity Foundation, India accounts for 63 per cent of the global textiles and garments industry (Charwak & Kumar, 2020; IBEF, 2017). For such a considerable contribution, the role of apparel designers in clothing manufacturing is universally acknowledged. Extant literature has reviewed the Indian fashion designer-wear industry as it is formed by the first wave of designers that emerged in the latter half of the twentieth century (Sandhu, 2014; Kuldova, 2016). The literary discourse is lacking in its examination of sustainability practices of emerging Indian designers, most of whom came up in the twenty-first century. In this study, we contextualise Indian fashion designer wear labels within the Indian fashion designer wear industry and conduct a sustainability analysis of the sector to understand the nature of the practices.This study adopted a Positivist research philosophy as it seeks to work with the observable social reality of the Indian fashion design industry and produce law-like generalisations about its structure and sustainability assessment (Remenyi et al., 1998; Saunders et al., 2003). Documentary secondary data was exclusively analysed. Different sustainability analysis models were combined to create a checklist to assess the sustainability practices of fashion designers in the Indian market. These included Fashion Design Strategies (FDS) wheel (Gwilt, 2012), models of sustainable product design for fashion apparel (Nerurkar, 2019), European Commission (Commission of the European Communities 2003), Niinimaki and Hassi (2011), Fletcher (2013), Kozlowski et al. (2012), Earley and Politowicz (2012). Nine main categories were achieved that were organised across the garment life cycle analysis framework, each with various sub-categories: garment design, material selection, pattern making, garment construction, distribution, end of life, garment laundering and repair. Finally, an impact assessment was done of these sustainability strategies in light of Porter's Hypothesis.

Environmental Sustainability Practices in IFD

- Crafts used: Ikat, Chanderi, Telia Rumal, Jamdani, tie-dye, all forms of block-prints, extra weft techniques (from Assam), Chikankari, Madras checks, and Himachali wools.

- Eco-friendly, organic raw materials, handloom fabric used.

- Use of scraps of fabrics and industrial waste as raw material.

- Upcycling, recycling techniques used.

- Natural colouring and drying processes.

- Clothes include elements like a change in size to last longer (up to 4").

- Gradual shift towards slow fashion and circular product strategies (Nerurkar, 2019).

Social Sustainability Practices in IFD

- Actively supporting artisanal communities.

- Designers engage with artisans in interactive creative processes to enhance the artist in them, creating pieces of work treading on the edge of design, craft, and art.

- Designers train handloom artisans to teach them about innovative product development techniques. This helps revitalise the community.

- Initiative to stop farmer's suicides in India with "organic" and "fair trade" farming practices.

- On the other hand, studies reveal incongruities between the claims of designers attempting to support artisanal communities and the experiences of artisans working with them (DeNicola & Wilkinson, 2020; Khatoon & Iffat, 2021).

BEST PRACTICES in IFD

DESIGNER	CONCLUSIONS
Doodlage by Kriti Tula	known as 'The Upcycler' uses scraps of fabrics, industrial waste with organic cotton and sustainable materials
Rustic Hue	works with local handloom weavers in the state to revive old textiles accessories made up of fabric scraps
11.11	Organic raw materials
[Ka] [Sha] - Karishma Khan	used Upcycling
Amit Aggarwal	constructed garments from discarded bindi sheets, recycled plastics and industrial materials
No Nasties	• 100% Organic raw materials • India's first fair trade licensed label • ethical policies toward craftsmanship • initiative to stop farmer's suicides in India with "organic" and "fair trade" farming practices
Conserve India	• pays waste pickers for all varieties of plastic waste and has so far transformed 12,000 tons of waste into belts and wallets (80% raw material from waste) • up-cycles waste like tire tubes, seat belts, fire hoses, cement bags, rice bags, packaging material
Green the map	• transforms old tires, tetra packs, waste cloths, waste leather, and other apparel wastes into new materials. • use poor background tailors for this purpose with good work environment
Upasana	• 100% organic garments with a mission to "design to change" • use of organic cotton, hand- loom manufacturing, herbal dyeing process, and traditional handmade printing methods like batik, ikat, etc. • upcycle their manufacturing waste into cost-effective products and components of their designs
Do U Speak Green	• manufactures garments form organic bamboo and cotton fabric in Fair trade certified factories. • dedicates its 10% of sales value to environmental conservation processes
Bhusattva	innovate their processes using technology like infusing bamboo, banana, soya bean fibers and blending it with khadi, silk, and cotton to make it compatible with mainstream fashion
Swati Argade for Bhoomki	• features brands who source organic, recycled, and/or artisan fabrics. • Their in-house line is cut & sewn in child-free factories; workers receive living wage under humane working conditions. • use low-impact dyes • offset shipping costs with carbon credits toward renewable energy initiatives.
Dilip Kapur of HiDesign	strong heritage of craftsmanship and innovative design
Samant Chauan	working for the cause of his native Bhagalpur master weavers

DESIGNER	CONCLUSIONS
Pero by Aneeth Arora	Crafts used (Ikat, Chanderi, Telia Rumal, Jamdani, tie-dye, all forms of block-prints, extra weft techniques (from Assam), Chikankari, Madras checks, and Himachali wools). Sources handloom fabric
	Any stock that does not get used is never sent back to the weaver or discarded, instead it is reissued into later in-house informal budget-friendly collections called Lazy Pero, or gets repurposed for creating new fabrics for future use through overdyeing, over printing, etc.
	In 2015 she launched Pero upcycle, a service through which she upcycles her clients' old clothes using her trademark embellishments.
Anita Dongre, Rahul Mishra, Rina Singh, Himanshu Shani (11.11), and Sanjay Garg (Raw Mango)	• Actively supporting artisanal communities. • Contemporary designers and craft proponents in India are united in how they see strong value in developing handcrafts to align with sustainable fashion agendas.
Bodice by Ruchika Sachdeva	Eco-friendly raw materials. Clothes include elements like a change in size to last longer (upto 4")
Raw Mango	Indian traditional weaves along with upliftment of an entire community. Different craft clusters in India such as Chanderi, Mushru Silk of Gujarat, Benarasi. More than 450 skilled craftsmen.
Anupama Dayal	• Wholly organic • Revive ancient hand-printing, dyeing, and needle-craft techniques. • Her creations use vegetable dyes and hand carved wooden blocks prepared by master craftsmen ,and undergo natural colouring and drying processes.
Anaka Narayanan for Brass Tacks	Effort to find new markets for traditional textile crafts and hand woven fabric
Paromita Banerjee	Handloom fabrics
Swati Kalsi	• Contemporary relevance to the time honoured handcrafted textiles of artisans pushing to create a basis for their livelihoods. • Designer engages with artisans in interactive creative processes in order to enhance the artist in them, creating pieces of work treading on the edge of design, craft, and art

Source: Self-Administered, 2022

(Sandhu 2020; Khandual & Pradhan, 2019; Rathinamoorthy, 2019; Sustainable Fashion, 2016)

Product Life Cycle Analysis in IFD

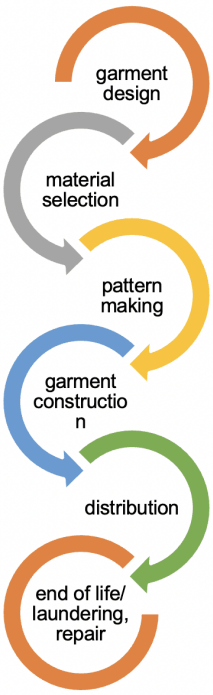

Figure 1: Sustainability Life Cycle Analysis

Source: Self-Administered, 2022

(Nerurkar, 2019; Gwilt, 2012; European Comission, 2003; Fletcher, 2013; Niinimaki & Hassi, 2011; Kozlowski et al., 2012, Earley & Politowicz, 2012; Munjal, 2021)

Expanded below

GARMENT DESIGN	MATERIAL SELECTION	PATTERN MAKING	GARMENT PRODUCTION/ CONSTRUCTION	DISTRIBUTION	GARMENT USE: LAUNDERING AND REPAIR	END OF LIFE
Design for Disassembly	Low Impact	Zero Waste	Design for water and energy efficiency	Minimum transport and Storage	Design for water and energy efficient clothing care	Material reuse /recycle/
Design for Recycling, upcycling, upgradation, reuse, remanufacture	Mono materials	Efficient Use of Resources	Clean Processes	Reduce/ Reuse Packaging	Design for Ease of Repair and Maintenance	Reuse of Product
Design for strong person product Attachment (Durable, Customise and co-create)	Organic fibre /Recycled		Fair Trade Ethical Supply	Engage with Local supplier	Up Cycle	Take Back
Design for Closed loop			Design for Durability		Multifunctional/Modular	Leasing/Rent/Share
Design for Slow/Long lasting			Minimum Production Waste			Remanufacture
Design for Customized			Tech coating to reduce laundering at use end			
Design for Half way			Use less chemicals or adopt RSL for processes like printing, dyeing			
Design for modular			Adopt mechanical processes for surfaces			TRIPLE BOTTOM LINE
Design for Co create			Adopt ethical production			Environmental
Design for Open source			Incorporate traditional, local, global craft skills			Social
Design for Local Production			Processing and finishing which consume less energy and water and			Economic
Multifunctional/Modular			Adopt technology like Nano technology- coating to reduce energy and materials			
			Adopt digital printing			
			Non-toxic colours			
			Certified factory			

Figure 2: Sustainable design strategies in the Life cycle analysis framework

Impact

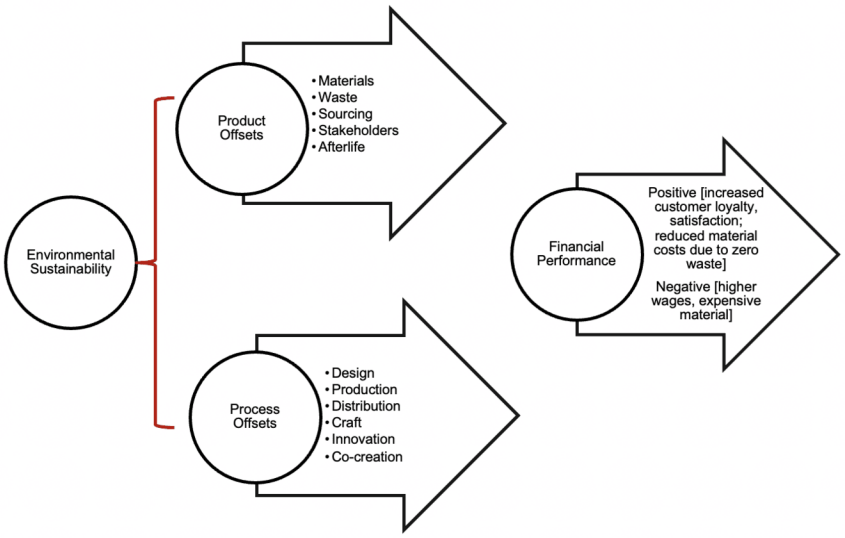

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Figure 3: Impact of Environmental Sustainability on Financial Performance

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